Complete Report of Conventions of Hardware Manufacturers and Wholesalers in this issue.

# AMERICAN/ARTISAN Taroware Record

VOL. 84. No. 17. 620 SOUTH MICHIGAN AVENUE, CHICAGO, OCTOBER 21, 1922. \$2.00

\$2.00 Per Year.

## Tell this to YOUR customers

Your customer may ask for "Armco" Ingot Iron, because for years he has heard it recommended as an iron that will last.

If he does, you ought to tell him what you know about it, too.

On the other hand, if he merely asks for the best sheet iron, and you use—as you will—"Armco" Ingot Iron, you should tell him all you know about it so that he will realize you are looking after his interests.

Tell him that if he wants his metalwork to last as long as possible, in defiance of weather, he must use an iron that will endure.

Tell him that "Armco" Ingot Iron not

only resists rust, but, when galvanized, the coating and the base metal are properly alloyed with no tendency of the galvanizing to crack, split, or peel where the stresses come.

Tell him that you can do your best work only when you have the best materials. Explain to him that the small extra cost at first is as nothing compared to the extra years of service.

And lastly, tell him that it's also a matter of pride with you—that you'd rather turn out a job that you know is going to last than one on which you will be called back to make repairs every few years.

Tell this to all of your customers.

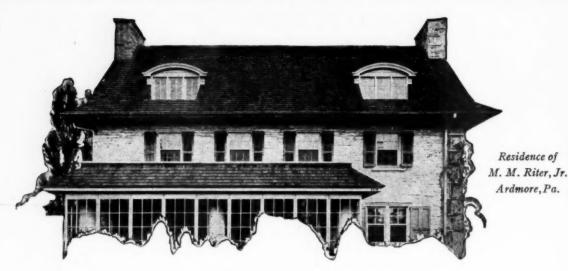
THE AMERICAN ROLLING MILL COMPANY
Middletown, Ohio



ARMCO INGOT IRON Resists Rust

Residence of

Ardmore, Pa.



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### AMERICAN ARTISAN Hardware Record

Address all communications and remittances to AMERICAN ARTISAN AND HARDWARE RECORD-620 South Michigan Avenue CHICAGO, ILLINOIS

PUBLISHED EVERY SATURDAY BY THE ESTATE OF DANIEL STERN

Eastern Representatives: C. C. Blodgett and W. C. White, 1478 Broadway, New York City

Yearly Subscription Price: United States \$2.00: Canada \$3.00: Foreign \$4.00

Entered as Second-Class Matter June 25, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879

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VOL. 84. No. 17.

CHICAGO, OCTOBER 21, 1922.

\$2.00 Per Year.

### SIMPLIFIED HARDWARE MEANS MORE PROFIT FOR MANUFACTURER, WHOLESALER AND RETAILER.

One of the great difficulties that many hardware merchants are contending with to-day is based upon the multiplicity—not only of different articles that they must carry in order to have a reasonably well assorted stock, but fully as much, of the great number of articles many of which would serve the same purpose but which for some reason they find it advisable to buy and try to sell.

That makes their turnover smaller, increases their "dead stock" and cuts down their profits.

It is, therefore, a matter on which the hardware merchants are to be congratulated, that there appears to be a properly directed effort to reduce the variety, or to use the expression of one of the speakers at the great hardware conventions which were held in Atlantic City during the week just past, to "simplify" hardware, and it is hoped that this effort will be sustained until the object shall have been attained and that the hardware merchant will no longer have to invest his capital in twenty different styles of hammers, for example, when ten are really all that there ought to be in his stock.

And not only will the retail hardware merchant be benefited, but the jobber, the manufacturer—and in the last place, the consumer, out of whose money all the others must make their profits.

For if, for example, a saw manufacturer no longer has to make 294 different sizes, styles or types of handsaws, but can serve his customers efficiently with, say 150 or even 100, is it not reasonable that he can manufacture each one of these, in larger numbers, at a lower cost, with more profit to himself and still at a lower price to the wholesaler and retailer?

The address by Mr. Durgin before the joint session of the American Hardware Manufacturers' Association and the National Hardware Association, who had for his subject that of "Simplified Hardware As a Means to Better Business," was listened to with great interest, and as Mr. Durgin pointed out, it has been possible to reduce types and styles in many other lines, so there seems to be no reason why the same should not be possible with tools, cutlery, cooking utensils, builders' hardware and in other branches of what we usually class as "Hardware."

Incidentally, here we have an example of really constructive work on the part of a government agency, and it is refreshing to note that occasionally after all, sometimes we can be fortunate enough to have placed in the Federal Cabinet a man who takes it as his business—not to see how many restrictions and difficulties he can put about the conduct of business, but to make a real endeavor to improve conditions under which business must be done.

More power to Mr. Hoover, the real business man in the Federal Cabinet.

#### October 21, 1922.

### Random Notes and Sketches. By Sidney Arnold

Loyd Scruggs, President of the Copper Clad Malleable Range Company, entertained me at the Missouri Athletic Club the other day and over our usual sandwich and milk (Loyd is reducing), he gave me some of his ideas as to the way some of the "laboring" class look upon their jobs and to illustrate he told the following story:

"I can see the red roses bloomin'!" sang the street vocalist inharmoniously, and he was about to begin the second spasm when a carpenter's helper beckoned him to his side.

"I'll give you a dime," he declared, generously, "if you'll stay in this shed until I come back. I'm dying for a drink." And the songster assented.

Soon the helper reappeared, wiping his mouth, and paid over the reward he had promised.

"I s'pose," said the vocalist knowingly, "that my voice is about the same as your own, an' that you thought your boss wouldn't know the difference—eh?"

The other looked at him indignantly, and he replied:

"Your voice the same as mine! I should hope not. If you want to know it's the same as the noise my saw makes, and I wanted the boss to think I was workin' hard on these planks."

R. J. Schwab, of Gilt Edge furnace fame, was in to see me the other day and told me about his trip to the land where they say Ponce de Leon found the fountain of youth, and I am free to admit that there must have been something down there in Florida that makes folks younger, for "R. J." looked twenty years younger than when I saw him a year ago.

Here is a good story he told me: It was a Sunday evening, the month was August, the place was New Orleans. A heated gentleman of color was weaving his way down the street when his attention was distracted by a lighted bookshop window. He sidled up and carefully read the inscription:

"'If Winter Comes'—Special Next Week—\$1.50."

"Mpf!" he ejaculated, mopping his dripping brow. "Ah'll gib mo'n dat. Ah'll gib fi' dollahs if wintah comes special next week."

\* \* \*

When Fred Nesbit, of the Standard Furnace and Supply Company, was in Chicago the other day we had a nice visit and while discussing Installation Codes and other social matters in which Fred is interested he mentioned the fact that some people were too lazy to give a fair day's work for a fair day's pay, and illustrated his remark by the following story:

Private George Washington Lincoln Botts held all laurels as being the laziest darkey in the Umptysteenth Stevedores. His idea of work was that it was something that wasn't done and his idea of real life was a continuous round of food. But one day at mess he did raise a howl.

"Lawsy me!" he bellowed. "Ah's done swallered a worm."

"Swallered a worm, is yo'?" demanded his top sergeant in deep disgust. "Cheer up, big boy, mebbe dat'll put some new life in yo'."

"There are some people whom nothing seems to disturb, no matter what happens," says Ray Schweinfurth, of the Mount Vernon Furnace & Manufacturing Company.

"For example, there was the lecturer who had been speaking for over an hour to a rather large audience when suddenly something went wrong with the lights and the hall was plunged in darkness.

"'Ladies and gentlemen,' he announced, 'this is not going to interrupt me in the least. All I ask is that the last person going out will give a signal so that I may end my speech."

"Some people are more easily satisfied than others," said Harry Woods, of the Premier Furnace Company, to me the other day while we were chatting in his office. "For instance, there was the deaf man who was being married, and the clergyman asked the usual question:

"Do you take this woman for your lawful wife?"

There was a short but disconcerting silence, after which the prospective groom replied complainingly:

"Oh, I don't know. She ain't so awful. I've seen worse that didn't have half her money."

One of my friends among the members of the Travelers' Auxiliary of the Illinois Sheet Metal Contractors' Association informs me that Secretary Frank Eynatten has been passing around Pittsburgh stogies in celebration of the birth of Robert Joseph, who issued his first orders as ruler of the world on October 7th.

Here are congratulations, Frank, and some day I shall collect.

A. E. Rudolphi, President of Rudy Furnace Company, likes to tell stories, and the other day when I called on him, he loosened up and related the following "colored" incident:

It was at the end of an imperfect hike, in which the colored outfit had tramped to Gehenna and back. One of the bucks, footsore and otherwise sore, meandered on blistered feet around to the supply sergeant's office:

"Sarge," he demanded, "Al wants a pair o' new shoes."

"Whassermatter dem yo' got on?" retorted the sergeant. "Pears lak dey's plenty good enough."

"On top dey ain' so wuss," admitted the private, "but dem soles is worn so thin Ah kin stan' on a dime an' tell whether she reads heads or tails."

### The Latest News About Stoves and Ranges

#### Items and Discussions of Interest to the Manufacturer and Retailer of Kitchen Ranges, Heating Stoves and Accessories.

#### When An Oil Stove Leaks It Is Time to Buy a New One.

In a recent issue of the Michigan Tradesman the following article appeared, and as we find in it considerable valuable information for the merchant who sells oil stoves, we are glad to give it further publicity.

It should be kept in mind, of course, that there is a two-fold object in the publication:

First, to warn housewives against using a leaky oil stove and to point out to them that the leak is not caused by poor material or workmanship, but is due to the oil which is obtainable and which contains corrosive elements.

Second, to use this warning as a means of increasing their sales of oil stoves.

The article follows:

"A dwelling house fire with loss of life occurred in Fort Wayne, Indiana, recently, when the George Blair home, on Beadell Avenue, was destroyed by fire starting from a defective kerosene cook stove.

"Results of investigations of more than a dozen of fires of this sort show that kerosene cook stoves of this type do not usually cause trouble when new. After they are in use for a number of years, however, small leaks sometimes begin to appear in the tank, burners or other parts of the stove. These leaks apparently are caused by corrosion from within, due to the presence in the oil of a small percentage of water as well as sulphuric acid. Both, water and acid, enter the kerosene during the refining process and while caustic soda solution is subsequently introduced to neutralize the acid, traces of sulphuric acid frequently remain.

"When kerosene of this sort is fed in to an oil stove, water and acid settle at the low points of the tank, burners and other parts, starting corrosion which finally results in leaks. These leaks may at first be so small that they can not be easily detected, but their presence is made known through the appearance of oil on the outer surface of the burners or other parts of the stove and later through oil dripping from the burners. It is at this stage that the stove begins to become dangerous, for sooner or later these oil drippings may cause trouble.

"Where the drip pan of the stove is kept scrupulously clean and wiped out frequently to remove all traces of oil, a stove of this type beginning to develop leaks may be continued in use for a little while with comparative safety. In many households, however, the closed bottom of the stove serves as a receptacle for the burnt matches used in lighting the burners or even match boxes and other articles. Here, after the stove begins to leak, the habit of flipping burnt matches into the drip pan may soon prove disastrous.

"Some housewives, when oil drippings begin to appear, keep layers of paper in the bottom of the stove to soak up the oil, replacing the paper once a day or as frequently as the stove is given a superficial cleaning. This is also a dangerous practice because, if a burning match is accidentally dropped below, the oil-soaked paper takes fire just as readily as an accumulation of burnt matches and other rubbish saturated with oil.

"Fires in the drip pan of a kerosene cook stove of this type may occur a number of times without serious results. Occasionally, however, one of these blazes evolves a sufficient amount of heat to melt the solder of the burners. The hood of the wick stem is usually one of the first parts to melt off, exposing the wick which immediately takes fire. More heat is evolved. Seams melt open and more oil begins to drip, adding fuel to the fire which now rapidly gains in intensity easily communicating to woodwork and other furniture and eventually involving the entire structure.

"When an oil stove begins to leak it has outlived its usefulness. It rarely pays to have it repaired, as new leaks will soon appear at other points."

Stove merchants may well emphasize this fact to their customers and thereby not only help to prevent fires and other damage but also increase their business.

### One Small A | Sells Five Ranges Overnight!

Where's that pessimistic dealer that's complaining, "Aw, advertising doesn't pay. You gotta show me!" Here's where we show him.

Several weeks ago The Stambaugh-Thompson Company, the great hardware and stove concern in Youngstown, Ohio, advertised Lorain-equipped ranges in the evening edition of the Youngstown Vindicator, using a space of but four inches on three columns. This ad appeared on Monday in the late afternoon. The next day before noon five Lorain-equipped gas stoves were marked "Sold." "Some results from advertising!" quoth H. C. Conner, Manager of the stove department of The Stambaugh-Thompson Company.

We agree with him—especially when we figure that the advertisement cost less than \$12, or less than \$2.50 per stove. Where's that pessimistic dealer who was knocking advertising just as we began this story?

The man who waits for business to come to him, and does not advertise while he waits, may have a long wait ahead and not much at the end of it.

### Spirit of Confidence and Sane Optimism Rule Conventions of Hardware Men in Atlantic

Speakers and Individual Members Express Faith That Prosperous Conditions Have Come to Stay and Improve.

THE twenty-eighth annual convention of the National Hardware Association was called to order at 8 p. m., Tuesday, October 17, in the Blenheim Ball Room of the Marlborough-Blenheim Hotel, Atlantic City, by President Austin H. Decatur.

Following President Decatur's introductory remarks the delegates stood and sang "America."

The invocation was by the Rev. J. E. Crowther, D.D., Arch Street Methodist Episcopal Church, Phila-

The annual address of President Decatur next was listened to.

#### Extracts from Annual Address of President A. H. Decatur.

For the twenty-eighth consecutive year we are assembled in convention from all parts of the country to consider and discuss matters relating to the manufacture and distribution of hard-These conventions have encouraged and stimulated a spirit of cooperation that has been extremely helpful in promoting the welfare of the business in which we are all engaged. Coopera-tion is the keynote in business manage-ment and business success, and the united effort of those interested in any one line of important work affords an op-portunity for the development of that work for the benefit not only of those occupied in it, but also for the ultimate benefit of the consuming public of which we are each a part.

The opportunities afforded for a general interchange of ideas, through personal touch of its members as well as through the discussions at executive sessions and through the office of our secretary-treasurer, have had a tendency to increase the interest and broaden the vision. There have been, during the life of this association, many new departures from our long established methods of distribution. What success has been achieved, I will leave for those who have studied the situation to determine. It is my opinion, however, that the hard-ware jobber of this country has never been in a stronger position than he is today.

It may be true that the present cost of merchandising is excessive. It is also true that the cost of what we eat, and of what we wear, and of our pleasures and entertainments, and even of our sleep is excessive. Most of us, however, believe that these conditions are temporary, and that, while we are in the midst of this period, we should pur-sue a conservative policy in business management. The manufacturers and jobbers have an opportunity, during this

convention, to present and discuss the ways and means of steadying and improving the general situation, and it is the hope of those who have planned this conference that the program will prove of definite assistance to every member

#### Business Outlook.

We have witnessed a decided improvement in business activities since we last met. Business activities since we last met. Business sentiment at present, in the closing months of 1922, is much more optimistic. The labor troubles which have extended to most parts of the country have undoubtedly been a handicap. Notwithstanding this fact,



A. H. Decatur, Retiring President, National Hardware Association.

business has continued to improve, and it is apparent that the tide has turned.

But we cannot continue on a wartime overhead and at the same time produce in proportion to the purchasing power of the people. Manufacturer, jobber, and retailer have tired of the fluctuating prices which have prevailed during these recent years and were beginning to feel that we were approaching a stabilization of values. But within the past few weeks there have been indications that we are entering upon another period of expansion and inflation. These conditions are characterized by many as an indication of a runaway market.

It seems most unfortunate that such apprehensions should arise at this time, and we should not encourage this apparent inflation by anticipated purchases at prices which will probably suffer re-action. On the other hand, manufacturers should not take undue advantage of an increased demand and consider it a reasonable excuse for advancing prices. I consider this a very important ques-tion for discussion by those here assem-

#### Turnovers.

The present high prices which prevail in most lines are accounted for by the lessening of the number of turnovers on account of increased investment, and by the increased overhead expense. The net profit of manufacturer, jobber, or retailer depends largely upon the number of turnovers. If we have increased our plants and our overhead during the period of inflation, and now find them out of ratio to the volume of business, we should not deceive ourselves by thinking that we can add this load to the cost of production or to the expense of dis-tribution. In other words, we should clean house and be in a position to meet competition and still make a profit.

#### Service to the Retailer.

The retailer is a great factor in the distribution of merchandise. Mr. Roger Babson, of the Babson Statistical Organization, states that ninety-five per cent of the goods sold in a mercantile way in this country go through the retail store, and seven per cent, only of this amount is sold through the chain store. The retail hardware dealer is therefore a distributor for the manufacturer and the jobber, and we should feel a responsibility for his success. Our duty does not end when we have sold him goods. We should help him in every way possible to turn the merchandise into cash. We should impress upon him the fact that he does not make a profit until he sells the goods; hence, the importance of the turnover.

We should render all possible assistance by providing him with sales helps such as advertising matter and displays. We should refer inquiries which we receive through advertising channels to the retailer, and assist him in following up the inquiry. We should pay particular attention to the competition which he has to contend with from the catalogue house, and by prompt service and right prices, assist him in convincing his buying public that it is to their advantage to make their purchases at home.

We should impress upon our traveling salesmen that our customers' interests are also their interests, and that they should make every possible contribution to the retailers' success. We should encourage among many of our retail customers a better accounting system which would enable them to have at all times a detailed knowledge of their condition, particularly regarding the expense ac-

I wish to take this opportunity to express to the officers and members of this association, my appreciation of the sup-port which I have received during my office as president. I desire to make special mention of the efficient work of our secretary-treasurer, who has served this association since its inception. His long period of office and his deep personal interest have been invaluable; his energy and loyalty have been unfailing. I wish also to commend the sincerity and ability of our assistant secretary, who has endeared himself to every member. We are to be congratulated that the clearing house of this organization is in such capable hands.

The annual report of Secretary-Treasurer T. James Fernley was then presented to the convention.

#### Extracts from Report of Secretary-Treasurer T. James Fernley.

Your association has kept in intimate touch with the members during the past year and has constantly endeavored to assist in every possible way during what has been one of the most difficult and trying years in the history of the business.

The hardware trade did not enjoy excessive amounts of war time profits but did bear heavy declines during the postwar period, but through careful and conservative management our members have, without exception, passed through the critical period in splendid shape, and

We are very hopeful that 1922 will show a decided decrease in overhead as compared with 1921, but it is too much to hope that it will be possible to so rapidly place the overhead on a prewar basis, because of continued higher wages, salaries, rents and other expenses.

#### Stabilization of Conditions.

In accordance with the instructions of our last convention we communicated with the manufacturers last November requesting that contemplated price reductions be made before December 31st, 1921, in order that our members might establish their inventory on a proper basis.

As a result of this action on the part of the association many manufacturers made reductions in their prices which would otherwise not have been made until after December 31st, 1921, inventories had been priced.

Our members during the past few years have paid hundreds of thousands age of accessories will be marketed through the hardware trade which has so clearly demonstrated that sound conservative methods are to be preferred to blind unthinking enthusiasm.

#### Profits During 1921.

Information collected from our members indicates that during the year 1921 there was an approximate decline in value of hardware and kindred lines of about 25 per cent.

With this shrinkage in inventory values and an average operating expense of 20.47, it was difficult if not impossible for any member of our association to make a very satisfactory showing for that year.

Many of the abnormal conditions which are an aftermath of the war are still with us and this convention gives us an excellent opportunity to interchange ideas for the purpose of hastening the restoration of more normal conditions surrounding our business.



Brace Hayden, First Vice-President, National Hardware Association.



James T. Fernley, Secretary-Treasurer, National Hardware Association.

are well prepared to continue their work of distribution, serving the retailer adequately as well as giving satisfactory service to the manufacturer.

The policies outlined by your president and executive committee have had for their purpose the making of the organization of the utmost value to every member, and you have been informed at frequent intervals regarding the work of the association.

#### Less Overhead Expense.

The association has again collected the overhead expense figures from the members and a chart which has already been distributed indicates that business during 1921 was conducted at a higher percentage of expense than in any previous year of which we have record.

Advice received from our members indicates that strict measures of economy are in operation and that every effort is being made to conduct the service of distribution at a minimum expense.

of dollars in federal taxes on "paper profits," caused by inflated values and all merchandise shrunk in value long before a real profit could be realized.

#### Automobile Accessories Branch.

The past year has witnessed many changes in the Automobile Accessories Supply and Equipment Industry and while the distressing depression in this line has been most unfortunate, it has had compensating features inasmuch as it served to point out weak points caused by the rapid growth of the industry.

It has clearly indicated that well established, financially sound wholesale and retail distributors are a source of great strength and those accessory manufacturers who were distributing a large portion of their product through hardware channels felt the depression to a lesser extent than others.

The accessories industry is now on a sounder basis than it ever has been and we firmly believe an increasing percent-

#### National Retail Hardware Association.

During the past year our relations with the National Retail Hardware Association have been of an extremely pleasant nature and it is particularly gratifying to note the retailers' appreciation of the service of the hardware wholesaler.

#### Differentials and Turnover.

Our conferences with manufacturers during the past year cause us to once more emphasize the point that manufacturers must be educated to the fact that a wholesale distributor cannot make a net profit on any item which does not sell at a margin over and above the cost of distribution.

With the expense of distribution averaging 20.47% is it profitable to handle any product which is re-sold on a basis of from 10 to 15% over the actual invoice cost? Does it not show an actual loss to the wholesaler on each turnover and the greater the number of turnovers

the greater the loss caused by handling such lines?

We, therefore, urge upon our members the great importance of advising manufacturers regarding the expense of distributing their products.

#### Parcel Post Shipments.

Members in all parts of the country report an increasing number of orders being received for shipment by Parcel Post.

The expense of handling such small orders (the average sale being \$5.37) is considerable and it is doubtful if such business is profitable, in fact, some members advise that it is being conducted at a positive loss.

The question of a solution of the problem presented by the rapidly increasing amount of this business will be discussed at this convention and we trust some practical solution will be suggested.

#### Increase in Membership.

The membership of our association

heavy it is believed that it would have been much more had it not been for this constructive policy of cooperation with retailers in districts where "frozen" credits were the rule.

#### Chain Store Method of Distribution.

In the latter part of 1919 financial interests who had secured control of an old established manufacturing plant embarked upon a plan of direct distribution of their product through their own retail stores and through agents selected from the retail hardware trade of the country.

During the past three years this plan has failed to develop along the lines projected by the promoters. They recently secured control of a long established wholesale distributing house with the idea that a combination of the manufacturing, wholesaling and retailing interests would work out more advantageously than the original plan which endeavored to function without the cooperation of the wholesaler.

treatment and delivery of the subject, "Why I Am An American."

At the conclusion of Dr. Crowther's address, President Decatur read the list of members of the Association who had passed away during the year, closing with the touching announcement of the death a few hours before of James Hardy, secretary-treasurer, Canadian Wholesale Hardware Association. Mr. Hardy was attending the convention, and succumbed to a stroke.

Prayer was offered by Dr. Crowther.

Presentation of fraternal dele-



W. H. Donlevy, Chairman Metal Branch. National Hardware Association.



F. A. Heitmann, Newly Elected President, National Hardware Association.

has increased during the year and while we hear of resignations in many organizations due to depressed conditions of business from which we have just emerged, our membership shows an increase over the record of last year's convention.

Our executive committee is continuing the policy of carefully scrutinizing all applications and recommending only those whose business is of a satisfactory volume and conducted on sound business principles.

#### Credit Conditions.

Our overhead expense chart reveals the fact that the loss from bad debts during 1921 was about double the loss

during the previous year.

The handling of accounts, particularly in sections where credit conditions have been bad, has been accomplished with great care on the part of the credit men of our members and while the percentage of loss through bad debts has been

Our only comment is to repeat the assertion made in our annual report two years ago that time will show that the distribution of hardware differs in essential particulars from drugs, groceries and tobacco.

In our judgment the discriminating buying public will not be content to accept hardware items under a general brand when it is possible to secure the products of old established and well known manufacturers at fair and reasonable prices.

Our association has always enjoyed active leadership on the part of its presidents, and we have been again favored by the sound judgment, and progressive policies of Mr. A. H. Decatur who has guided us safely during the past year.

In the inspirational address which followed, Dr. Crowther thrilled the delegates again and again with his gates to the convention was next on the program. Brief responses were made by the following:

Isaac Black, president, American Hardware Manufacturers' Association.

W. M. Pitkin, president, Southern Hardware Jobbers' Association.

John Donnan, secretary-treasurer, Southern Hardware Jobbers' Association.

C. H. Casey, president, National Retail Hardware Association.

Herbert P. Sheets, secretarytreasurer, National Retail Hardware Association. Thomas M. Birkett, president, Canadian Wholesale Hardware Association.

The closing address of the opening session was by William A. Durgin, United States Department of Commerce, on "Standardization and Simplification in Industry."

### Simplified Hardware as a Means to Better Business.

Secretary Hoover's attention was first drawn to the possible improvement in our business conditions through Simplification (as we like to call it) by an investigation made by the Federated Engineering Societies, some three years ago when he was their president. At his suggestion, committees of the Association carefully surveyed six of our leading industries with the view to deter-

find 13 sizes of handsaws listed with from 1 to 48 variations in each size, so that you can buy from 86 to 294 varieties from a single manufacturer.

In crosscut saws you can get 937 varieties from one maker.

In shears as made by six manufacturers, the survey showed 16 distinct types made in 14 sizes, while under any size there are upwards of 76 variations—one manufacturer making 266 kinds of shears.

When it comes to hatchets, as developed by four manufacturers, there are fourteen types made in from 1 to 7 sizes, up to 9 patterns and 11 brands and finishes—a single maker offering 326 kinds of hatchets.

But even this pales before the axe story. Three manufacturers are offering 34 models in from 1 to 4 grades, in from 1 to 35 brands, in from 1 to 11 finishes and from 5 to 19 sizes—these three men actually offering the public six thousand one hundred and eighteen different sin-

1 st National Congress in Chicago on June 22 of this year: "Because the members of the National

"Because the members of the National Retail Hardware Association are sincere in their desire to have the public supplied with merchandise at the lowest possible spread between the cost of the raw material and labor and the ultimate retail prices:

"And, because it is realized that many unnecessary types, patterns, sizes and finishes have gradually been added to hardware lines for competitive and other reasons, and that these tend to increase the cost of manufacture because of the necessary higher unit cost, and to increase the cost to distribution because of the larger stocks and therefore the heavier investments required;

heavier investments required;

"Therefore, this Congress heartily endorses the measures that have been taken by the Division of Simplified Practice of the Department of Commerce to reduce these unnecessary costs, and it pledges its hearty support, co-operation



F. Baackes,
Vice-President,
Aerican Hardware Manufacturers' Association.



Samuel D. Latty,
Vice-President,
Aerican Hardware Manufacturers' Association.

mining the amount of preventable waste under commonly accepted methods. These six industries were: Metal trades, boots and shoes, textiles, building, printing, and men's clothing. The percentage of wastes in each ran from 29% to 64%. On an average, 40% of all the capital, labor, thought, effort, time, put into these tremendously important industries, wasted—absolutely thrown away, with nothing to show for it. To be sure, the investigators were engineers and you may wish to discount the technical men's findings. But even admitting they are half right, there is an annual waste of 20% in these industries, running into billions upon billions of dollars each year.

In certain preliminary surveys made by Mr. Herbert Sheets as representing Secretary Hoover, the present varieties in many hardware lines are rather startling.

Considering only three manufacturers of saws and a single style of teeth, we

gle-bit axes; and, once more, on the sales manager's basic creed, "We must give the buyer what he wants," you and I know that if we only insist long enough and emphatically enough, we can get any one of the 34 types, in any of the 4 qualities, in any of the 35 brands, in any of the 11 finishes and in any of the 19 sizes, so that we may exercise our discrimination between nine hundred and ninety-four thousand eight hundred and forty axes.

Perhaps you will consider that story a bit stretched; but at least it shows possible developments if the present trend to diversification in hardware continues.

Now, the manufacturers tell us they would be glad to simplify, but that the jobbers insist on new varieties; and the jobbers say that they would like to simplify, only the retailers must have new varieties; so finally we go to the retailers and ask them and they say in the words of the resolution passed at their

and assistance to the Department of Commerce, in applying the principles of simplified manufacturing practice to the hardware industry."

The 25,000 retail hardware dealers represented by the National Retail Hardware Association are thus squarely committed for simplification and as the retailer wants it the jobber must admit his commitment, and since the jobber wants it the manufacturer is really committed, too. At least, that is what we would like to believe, if we did not have to consider the complex adjustments of opinions and personalities which must be accomplished before any real simplification becomes effective.

The true function of Federal Govern-

The true function of Federal Government in commerce—is not to originate thought and practice, not to function as experts developing the last word, but to discover the true experts in industry itself; to bring them together for agreement; to support their findings with the full weight of a great department.

We believe we have a service to offer to Hardware. If you saw men will get together during this convention; will appoint some one within your own number to make the necessary survey of production figures; to prepare some form of report indicating what sizes you can honestly recommend as the best, we can get together a conference at Washington which will insure that your consumers will demand those sizes as the major portion of their stock.

If you file men, your hammer men, you cutlery people, similarly, will get together in groups this evening or tomorrow morning and arrange some organization in your particular interest which can make an adequate survey of present diversity, you will then be in position to see whether further simplification will be truly constructive.

Remember, the initiative, the followup, the acceptance remains entirely with you. If at any stage you feel that Sim"Market Conditions and Tendencies" was next on the program.

Able discussions of "The Evils of Price Inflation" were presented from three viewpoints by Robert F. Hunter, Hukill-Hunter Company, Pittsburgh; J. H. Boucher, Rochester; and A. C. Cade, Allen & Jemison Company, Tuscaloosa, Alabama.

#### Wholesaler's Part of Fictitious Inflation.

"We all had a great deal of experiences during and shortly after the world war, and we must gather some very valuable lessons from this experience. We all know that placed with several factories, simply because shipments were slow, and if all had shipped he would have been badly overloaded with stock.

"Now of course this method of placing orders for about four or five times as many goods as needed would indicate to the manufacturer that many more goods are wanted than are needed, and as demand usually raises prices you can see this is a bad practice, and may help to fictitiously inflate prices again. In conclusion, we should order conservatively, not speculate, and thereby do a good business and reapthe reward."



Arthur B. Birge,
Executive Committee.
American Hardware Manufacturers' Association.



S. M. Stone,
Retiring Vice-President,
American Hardware Manufacturers' Association.

plified Practice has more of hazard than benefit, you can stop at once. But at least fully inform yourselves of its application to your particular specialty before making your decision.

Following announcements by the entertainment committee, the session adjourned.

#### Wednesday's Session.

The gathering reconvened at 10:15 Wednesday morning in executive session, and heard the report of the executive committee, which was interestingly received and discussed.

A short round-table discussion of

prices were very, very much inflated and came down very, very suddenly, and there were many reasons for this, the wholesaler certainly contributed to the fictitious inflation.

"I deem it timely to review at least one cause which we can help to prevent, as on account of coal strikes, railroad strikes, car shortage, and the usual harvest time rush for supplies, we may drift into this mistake again, too many wholesalers ordered many more goods than were needed, orders being The report of the Overhead Expense Committee was presented to the convention by John M. Townley, Townley Metal and Hardware Company, Kansas City, and general discussion followed.

Other interesting discussion of the morning included: "Why We Do not Make More Money," led by P. L. Logan, Logan-Gregg Hardware Company, Pittsburgh, and "The Need of the 'Why' in the Distribution of Hardware," led by Lewis H. Bronson, the Bronson and Townsend Company, New Haven.

With the appointment of the committees on nominations and resolutions, the convention journed for luncheon.

The Wednesday afternoon session was devoted to discussions, among which were:

"The Expense of Handling Parcel Post Shipments," led by Edwin R. Masback, Masback Hardware Company, New York City.

"Increased Expense and Decreased Profit," led by George E. King, King Hardware Company, Atlanta, Georgia.

"The 1922 Idea of Wholesaler Service to the Retailer."

"The Mennen Case."

"Selling the Wholesaler to the Dealer and His Clerks," led by Frank A. Bare, The Tritch Hardware Company, Denver, Colorado.

"The Distribution of Radio Supplies," led by E. E. Bucher, Radio Corporation of America, New York City.

#### Thursday's Sessions.

Thursday's program was devoted to group meetings, which began with the Builders' Hardware Group at 10:15 a. m. Interested manufacturers and active members of the Association were present when President Decatur opened the discussion on "The Outlook for Building Construction in 1923."

W. A. Willis, manager, Copper and Brass Research Association, New York City, gave an instructive address on "Pushing the Quality End of the Line."

#### Excerpts from Address of W. A. Willis.

Strange as it may seem, business men still believe in signs. And one pretty good sign of sure-enough better busi-ness is a noticeable increase in demand for the better grades of merchandise. When, as our present reports indicate is now the case, people begin to say, "Have you something a little better?" instead of "Is that the cheapest you have?" we really begin to feel that, after all, better business is more than a mirage-that this time you can reach right out and touch it.

Increasing purchasing power is the underlying cause of this reversion to the better grades of merchandise. I say reversion, for most people realize the economy of quality, and only buy the inferior grades when stern processity disinferior grades when stern necessity dic-tates. The demand for better goods is hastened by the consumer's experience with cheaper, and invariably less satisfactory merchandise.

You probably all know the story of

the burglar, who when asked to what he attributed the noticeable increase in stealing, replied, "Poor hardware."

That sounds to me like propaganda for the police department! For the very names of a considerable number of hardware dealers are watchwords of quality, value and service.

But precisely as there is no doubting the vast difference between the quality of the product of these dealers and manufacturers and a lot of hardware which in quality and service is mediocre or worse, so is there no doubting the dif-ference in the serviceability of the dif-ferent metals of which hardware is made.

Because brass and bronze do not rust, because they keep their original attractive appearance, because they are cheaper in the long run-they are invariably the



Bradford H. Swift, Executive Committee, American Hardware Manufacturers' Association.

preference of discriminating purchasers of hardware, for no other detail of a house gets such hard, constant use, and none is more noticeable. Es this true of the so-called hardware." Especially is ed "finishing

Competition, always active, and like as not unfair to both, has forced the production of inferior quality goods, has frequently stayed mechanical improvement, and is today responsible for the "plated" hardware designed to look just good as the real thing, in order to sell at lower, ever lower, prices.

#### Cheap Hardware Is Always Expensive.

The underlying cause of this movement, which pleases neither manufacturer, jobber, retailer nor consumer, and so pleases nobody, is failure to face the fact that cheap hardware is always expensive in the end.

It does little good just to talk about it—somebody has got to hammer the facts home, so that the court of last resort, the great American public, knows, and acts on, the facts. It is for that very purpose, among others, that the Copper and Brass Research Association, with which I have the honor to be

associated, was formed.

During the period of the war, copper and its alloys were entirely removed trom domestic commerce. Wars are fought on rations of brass, bronze and copper. From the bronze buttons on each khaki coat to huge brass cartridge cases and copper gas bands around the 18-inch shells, copper plays a vital part.

At home, something had to be used in place of these more durable metals for, copper or no copper, brass or no brass, doors had to be locked, houses had to be roofed—and water (even in those days) had to be distilled. The result was a deluge of substitution that proved, when the war was over, a for-midable brake on the progress of the brass and copper industry.

#### Heavy Advertising to Public.

So the advertising and publicity campaign of the brass and copper industries is being addressed to the general public in order to point out that copper in order to point out that copper and brass are available for the same kind of expense-proof, rust-resisting service that have made the names of these metals synonyms for durability

and reliability.

The public's appreciation of the qualities and service of copper and brass is shown by the fact that the metals have been lifted into our language in such a way as to express a permanent appreciation of their value. Of the pet phrases that illuminate our daily speech, none has greater effectiveness as ex-pressing economy of time and effort and avoidance of waste than "getting down to brass tacks," or, as expressing cer-tainty, permanence, there-to-stay-ness, as being "copper riveted."

We believe that the tide of public fa-

vor is setting in more strongly all the time in favor of enduring materials. And we were not long in finding out, so far as brass and copper are con-cerned, that people instinctively trust those metals—that what is needed is to keep the public constantly reminded that brass and copper are at their disposal in plentiful supply, and to show them that the brass and copper companies are sin-cerely desirous of cultivating the good-

will of this great, big American market.

I know that price differentials are often a problem, a big one, too. But often a problem, a big one, too. But that problem is, I am confident, not insoluble.

For one thing, I believe that the deal-er's best cards in selling hardware are service and quality. The home-owner will not buy on a price basis if he is properly shown that to do so means trouble and expense which make his so-called "cheap" article cost more while called "cheap" article cost more while the memory of his purchase is still

#### How Hardware Merchant Won.

A successful hardware dealer told me a story of a particularly difficult case where he tried to sell an owner some brass building hardware. He met with strenuous price resistance. Finally he argued it this way, to quote from his own letter

Our bid for hardware was \$400.00 and he had a price on the hardware of another manufacturer for \$275.00, a dif-ference of \$125.00. Well, I talked to him along the line of the house being an investment, knowing that he was not paying for the house entirely in cash and that part of it was borrowed money. probably at the rate of 6%, that it would cost him only \$7.50 a year on his investment to have my material in place

of the cheaper goods. That is all that was necessary. He saw the argument in a nutshell and figured his carrying charges and thanked me for the illustration."

On this question of prices, it is my belief that the concentrated force of advertising, together with a growing appreciation on the part of the public of the economy of the quality end of the line, is bound to speed up turnover, that sensitive mercury of the thermometer of trade

We, of the brass and copper industries, realize that to make real progress in our efforts to increase the consumption of brass and copper, we have got to help those who are the outlets through which the metals go into use, if we are to provide that impetus which changes a consumer preference into a concrete, unmistakable demand. This cannot be accomplished successfully, save by holding up the hands of the hardware dealers, sheet metal contractors and others of similar office in other fields.

With the tide unmistakably setting in toward quality merchandise, now is the time to plan, by careful buying, judicious advertising, attractive window displays and well-directed sales effort, to cash in on the quality end of the line.

Having carefully studied your clientele so that you know its wants, the problem is merely one of letting them know where to go to fill their needs. As I conceive it, the retailer's responsibility is to tell his trade where they can get it, but it is up to the manufacturer to tell the public why they should get it.

tell the public why they should get it.
Acting on this theory, the Copper and Brass Research Association is carrying on a vigorous campaign to remind people of the reasons—familiar to almost everybody when they really think about it—why brass and bronze hardware have the right to their confidence.

#### General and Personal Publicity.

In addition to the advertising which we are carrying in such papers as Saturday Evening Post, Literary Digest, House and Garden, World's Work, Review of Reviews and others, we are supplying dealers with counter cards and mailing pieces which enable them to tie up to our nation-wide effort. Every time a building permit is issued in your neighborhood, the person who plans to build receives a letter from us, pointing out the value of using permanent, rust-proof materials throughout the building, with prominent mention of hardware.

Inquiries concerning brass and bronze hardware have come to us not only from all over the United States but from all over the world as well—from Palestine, Java, the Straits Settlements, British Congo, the Philippines, Canada, Mexico, Porto Rico, Costa Rica, China, Hawaii, Colombia, Spain, Italy, England, Holland, Belgium, Roumania, Brazil, Australia, Venezuela and Argentina.

stralia, Venezuela and Argentina.

A Pennsylvania farmer writes us as follows:

"May I say a word of congratulation on your present advertising? I have often wondered why it is so nearly impossible to buy genuine copper and brass articles, and so fatally easy to get 'coppered,' 'washed,' and poorly 'galvanized' hardware of all kinds. Success to your campaign of education."

A few days ago there came to us a

A few days ago there came to us a letter from a hardware dealer in a large city in the west. He asked for some of our dealer-help material and then went on to say:

"In our Builders' Hardware department it is brought before us daily how little the average customer notices the difference between plated and solid brass goods."

"We frequently lose the hardware order of prospects, because one of our main competitors deliberately substitutes plated goods where he had the prospect believe he would furnish solid brass

goods.
"The contractor does not know what the owner selected, and, if he does, in most cases will not bother about informing the owner of the substitution. After a while, when too late, the owner of the house notices he was 'stung' on the hardware. It's crooked, but what is he going to do about it, when it's too late?"

going to do about it, when it's too late?"

We believe that all but an insignificant number of hardware dealers sell fairly—frankly explain the difference between plated and solid brass. Given, then, a sufficient advertising impetus to increase the turnover of solid brass, the sole remaining handicap of brass hardware, the price differential, will likewise gradually cease to be a factor.

In conclusion, let me say that I earnestly believe the quality end of the line can be made to be the steady-going, profitable end of the line, by means of continuing, straight-forward advertising that shows the economy inherent in quality merchandise

quality merchandise.

The slogan that "Copper and Brass are cheaper, because you pay for them only once," conveys the idea about as forcefully as I know how to put it, so far as our metals are concerned.

Team-work between the man who makes it and the man who sells it is the key to the situation.

Other discussions of the session included "The Unit System of Packing and Pricing"; "The Elimination of Unnecessary Sizes, Finishes and Patterns" and "How Can the Distribution of Builders' Hardware Through the Wholesaler Be Improved?"

Other group meetings were those of Small Tools, Cutlery and Sporting Goods, Housefurnishings and Electrical Goods.

#### Metal Branch Held Meeting Thursday Afternoon.

The Metal Branch, which is the oldest organization within the National Hardware Association, held its meeting Thursday afternoon, with W. H. Donlevy in his place as chairman.

Mr. Donlevy opened the meeting with an inspiring address from which the following excerpts are quoted:

#### Extracts from Annual Report of Chairman W. H. Donlevy.

In reviewing the activities of the Metal Branch for the past year, we shall refer briefly to the most important subjects that had our consideration.

#### Roofing Plates.

Tin roofing has again come into its own in many sections of the country. There has been a steady increase in the consumption of roofing plates, and it is noteworthy that a large percentage of the demand has been for heavy coated plates.

This indicates education on the part of architects and sheet metal contractors, to the great benefit of the property owners.

It might be well to state at this point the quality of terne plates now being made in our country is equal to or superior to any in the history of the industry.

#### Building Expansion.

The enormous increase in building operations this year in all parts of the country has naturally caused a large consumption of steel in its various forms,

The prospects for a continuation of this activity for the coming year are good, unless checked by strikes or unreasonably high prices.

#### Trade Relations.

The Metal Branch recognizes the splendid work being done by the National Association of Sheet Metal Workers, and our committee appointed to cooperate with their Trade Development Committee will also report at this meeting.

#### Market Conditions.

Combined reports from all sections of the country indicate there has been a large movement of merchandise from wholesalers' warehouses during the summer and fall. This condition still prevails and should continue the balance of the year.

Because of steel shortage and scarcity of cars, stocks of our merchandise are in some cases not well balanced. Prices are strong, and some manufacturers insist there will be further advances.

Neither manufacturer or distributor should be compelled to do business at a loss, nor should there be unwarranted advances in prices, thus inviting another period of inflation, which always ends so disastrously.

Our country is in a fairly prosperous condition, and barring unforeseen obstacles, we are warranted in facing the coming year with confidence and optimism.

H. H. Morse followed with an address in which he told interestingly of the work of the Department of Commerce, with the Bureau of Foreign and Domestic Commerce of which he is connected.

The chairman then called upon representatives of the various mills for remarks on the steel sheet market situation, after which the reports of the various committees were rendered, special attention being given to the report of the Trade Development Committee, as given by A. W. Howe, of J. L. and M. A. Osborn Company and H. N. Taylor, of N. and G. Taylor Company.

This was followed by an address on the "Sheet Copper Situation," by W. A. Willis, manager of the Copper & Brass Research Associa-

According to statements made by mill men prices on steel sheets of all kinds are sure to advance.

After a general discussion on various subjects, Robert H. Lyon, of Lyon, Conklin and Company, gave his moving picture lecture on "Lightning Proof Qualities of Metal Roofing."

The meeting adjourned at 4:45 p. m.

#### Friday's Session.

The closing session was held Friday forenoon, being devoted first to discussions on credits, returned goods, past due accounts handling of orders, etc., after which the election of officers took place, with the following result:

President-F. A. Heitmann, F. W. Heitmann Company, Houston, Texas.

First Vice-president—Brace Hayden, Dunham, Carrigan and Hayden Company, San Francisco, reelected.

Second Vice-president-John M. Townley Metal Townley, Hardware Company, Kansas City.

Secretary-Treasurer—T. James Fernley, Philadelphia, re-elected.

R. P. Van Camp, Van Camp

Hardware Company, Indianapolis, was elected to the Executive Committee to succeed Mr. Townley.

President Harding's veto of the benus bill was strongy endorsed in a resolution adopted.

Take the tariff out of politics and put tariff matters in the hands of a permanent board of experts was the sense of a resolution unanimously adopted.

Another resolution expressed the appreciation of the convention to Dr. Crowther, Mr. Duigen and all speakers and officers and thanking the attending manufacturers for the interest displayed and the hotel and railroads for exceptional courtesies.

Particular mention was made of the services rendered by Secretary-Treasurer Fernley and by Chairman Donlevy of the Metal Branch and Chairman Ellis of the Automobile Accessories Branch.

#### John C. Kroner Dies Suddenly in Atlantic City.

One of the prominent Wisconsin hardwaremen, John C. Kroner, of the Fred Kroener Hardware Company, LaCrosse, died some time during Tuesday night, while in attendance on the Convention of the National Hardware Association.

He was a passenger on the special train run from Chicago, arriving in Atlantic City Tuesday evening, and had been in fine spirits on the entire trip, so that the announcement of his death the following morning was a complete surprise to his many friends.

#### Canadian Wholesale Hardware Secretary Dies at Atlantic City.

The sudden death on Tuesday evening, October 17th, of James Hardy, President of James Hardy, Sons & Company, Toronto, and Secretary-Treasurer of the Canadian Wholesale Hardware Association, put a damper on the spirit of his many friends among American wholesalers and manufacturers attending the Atlantic City conventions.

While strolling along the Board-

walk just before dinner, Mr. Hardy, 70 years old, suddenly collapsed as he reached Florida Avenue. People passing on the strand thinking that he was sick lifted him to a nearby pavilion and hailed a rolling chair. In the meantime, somebody phoned the hospital and the ambulance responded with a doctor, who pronounced Mr. Hardy dead. Dr. Lewis Souder, coroner's physician, stated that death was due to hemorrhage of the brain.

#### Retail Hardware Doings

#### Illinois.

J. Hugh Weillopp has disposed of his hardware stock at Bloomington to Bert Myers.

Fire destroyed the hardware store of Smith and Slyter at Morris.

#### Indiana.

Ira and Martin Virden have pur-chased a stock of hardware in Columbus.

#### Iowa.

R. L. Garnett is engaged in the hard-

ware business at Alburnette.

A deal has been completed whereby
J. Scholten becomes owner of the Henry Kuiper, Jr., hardware stores at Hull.

#### Michigan.

Patch and Remington, hardware dealers at Marcellus, have dissolved partner-ship. The business will be continued by Frank W. Patch, who has taken over the interest of his partner. Haffner and Lytle have taken over M.

D. Phelps and Company's hardware store at Flushing.

#### Minnesota.

Fire destroyed the Lewis Hardware

Store at Pine City.
Alfred J. Krank Cutlery Company of St. Paul have opened a hardware store at Fourth Street and Marquette Avenue, Minneapolis.

A. J. Thorwick has sold his interest in the hardware business at St. Hilaire to P. E. Bergh.

#### North Dakota.

James and John Kelly are planning to open a hardware store at Wahpeton.

#### Ohio.

The Toledo Hardware and Supply Company has been incorporated at To-ledo with a capital of \$10,000. Incor-

porators are John G. Deep, Joseph A. Gessner, and Fred Staebler.

At Pauling, a deal has been closed whereby Edward Finan takes over the hardware stock heretofore owned by Cash Bashore.

South Dakota. The Fisher Hardware Pierre has been damaged by fire. The hardware store of Richard Fluth at Bonesteel has been destroyed by fire.

#### Wisconsin.

Fire at Prentice completely destroyed the hardware store owned by Robert Magnuson.

The Barlow and Seelig Hardware Company of Ripon have changed their name to the Kohl Brothers Hardware Company.

### Manufacturers Say Higher Prices Must Come.

The members of the American Hardware Manufacturers' Association spent a great deal of their time during the convention in group meetings with the wholesalers, but three executive sessions were held, the first being on Wednesday fore-



F. D. Mitchell,
Secretary-Treasurer,
American Hardware
Manufacturers' Association.

noon, at which the annual address of President Isaac Black was delivered and the annual report of Secretary-Treasurer F. D. Mitchell was read, followed by various committee reports.

C. H. Casey, president of the National Retail Hardware Association, also spoke.

After appointment of committees on resolutions and nominations, the session was adjourned until afternoon, when matters pertaining to the broadening of the Association's service to its members were discussed.

The manufacturers announced at Thursday's joint session that hardware prices will advance after jobbers had made efforts to induce manufacturers to cut prices, particularly on builders' hardware to encourage building. Manufacturers insist that this is impossible, because labor and raw materials are higher.

The report of the Resolutions Committee of the manufacturers contained the following recommendations which were adopted on Friday:

Sympathy to Kroner and Hardy families.

Disapprove policy of limiting immigration to fixed number and urge adoption of selective tests to be applied at embarkation points as well as upon arrival in this country.

Request the Crowell Publishing Company to furnish facts and reasons for publication of stories in Collier's, leading the public to believe that scythes now made in America are inferior to those made years ago.

The annual election took place Friday forenoon with the following result:

President—Isaac Black, of Russell & Erwin Manufacturing Company, New Britain, Connecticut, reelected.



Irving S. Kemp,
Executive Committee,
American Hardware
Manufacturers' Association.

Vice-presidents — Samuel D. Latty, of Kirk-Latty Manufacturing Company, Cleveland; Frank Baackes, of American Steel & Wire Company, Chicago, and W. A. Graham, of Wallingford Manufacturing Company, Wallingford, Connecticut.

New members of Executive Committee—Irvin S. Kemp, of Evansville Tool Works, Evansville, In-

diana; T. J. Ray, of Peck, Stow & Wilcox Company, Southington, Connecticut; E. C. Waldvogel, of Yale & Towne Manufacturing Company, New York City, and W. L. Schumacker, of Toledo Wheelbarrow Company, Toledo, Ohio.

### Auto Accessories Men Hear Interesting Discussions.

The Automobile Accessories Branch was called to order Monday, October 16th, at 10:30 a. m., at The Ambassador Hotel by President Austin H. Decatur. In opening the meeting the President said:

It becomes my duty as President of the Association to formally open your Convention, and I assure you that it is a pleasure. As I look upon you today I see many of the same ones here that were at the first convention over which I had the privilege to preside, and you are to be congratulated—I will say that we are to be congratulated—that there are so many of you who have passed through since our first Automobile Accessories Branch Convention, and I feel, and I presume most of you feel the same way, that we have passed the crisis; that the tide has certainly turned and we are facing a much broader future.

The National Hardware Association feels that in the Automobile Accessories Branch, if there was ever a doubt, that doubt is removed regarding its place in the Hardware trade. Most of us started late in the automobile accessories business—too late. It was a mistake of the hardware jobbers that they did not start when the accessory business started. That will be conceded by every hardware jobber who is in the business today, and when you start late at anything or for any place, you have got to go some to catch up, and that is the position in my mind that the hardware jobber is in today in the accessories business—anyway they are trying to catch up to where they should have been in the early days of the accessory business.

We got started, many of us, and the War came on, and it was certainly a setback to the hardware jobber as far as the accessories business went, for you must realize that most of us had more than we could attend to in our stable lines. We had the opportunity of investing all the capital that we had to carry on that business through the inflated period, and naturally the newer lines were given less attention than the general lines which were established.

But the situation has changed; the jobber who passed through that period and had the inflated as well as a largely increased business, is now looking for anything that will bring volume and profit and enable him to catch up in the vicinity of the point that he had reached in volume; so I believe that you will find the attitude of the hardware jobber throughout the country very different from what it has been in the past two years.

I feel, in expressing myself regarding your Convention, that it is developing more and more each year in the matter of education; that is what we need in a line of this character—education. We want to get the education from everywhere, from people here in the Convention and in other ways, and we need to educate the retail hardware men. We must all admit that there are enor-

mous quantities of automobile accessories being used and being worn out all the time, and if I were a hardware man in a small town or a large one and saw some little accessories shop across the street doing a successful business I would feel that I should take some room or some corner of my store and get a man who knew something about accessories and try at least to sell as many accessories as that garage or the little fellow across the street; have somebody in your employ who would know some-thing about automobile accessories and every time a person came in for anything in the accessory line your specialty man can talk to him.

I believe that the hardware jobber should handle automobile accessories, and that he should try and educate the retail hardware dealer on the importance of handling this line and the opportunity it affords of adding volume and profit to

his business.

I am now going to turn the meeting over to the Chairman of this Branch. He has done excellent work during the year and is probably as well fitted to be Chairman of this Branch of the business as anyone in the Hardware jobbing trade. He will be in a position to edu-cate us and help us during the conven-tion. I present Mr. George W. Ellis.

Chairman Ellis spoke in part as follows:

The program your Secretary and Committee has so carefully arranged for this occasion is headed by an address from the Chairman, the pleasing task which falls to my lot again this year. It is not my intention to make an elab-orate address nor would you have me do so, but to talk to you in a very in-formal manner that will best serve to contribute our thought and energy to the greater development and further-ance of our business. I trust you all take advantage of the opportunities this occasion affords by offering good, helpful and constructive suggestions that will develop closer business relations between the manufacturer and the jobber, so that we can arrive at a better understanding of each other's problems in a manner that will serve to promote a greater friendship.

To do this we must avoid petty dif-ferences for the common good of all, which stands for better co-operation and which stands for better co-operation and service. It has been my pleasure, yes I might say a privilege, to review the elaborate exhibits our manufacturing members have set up of their products and I wish to thank each of you for the part you have taken to make this part of convention a success.

We are extremely fortunate to have with us a manufacturer of experience, who will be our next speaker, as those next listed on the program have not arrived. We will hear from Mr. Frank T. Chase of the Frank Mossberg Company, Attleboro, Massachusetts:

Mr. Chase spoke in part as follows:

#### Present Prospects for the Spring of 1923.

"Admiral" Decatur a few moments ago spoke about the need for education and the need for study. Mr. Ring, one of our bosses, last year said that no one need to look up statistics unless they are going to use them, and what I am going to say are simply opinions. If you succeed you must absolutely foresee and to foresee you must absolutely

study.

I believe the retailers today are better merchandisers than they were. I be-lieve the retailer has worked it out better during the last four or five years at least I believe he has been in a position where he could be a better mer-chant, probably because of his close contact with the buying public and has a quicker reaction to public opinion.

Personally, I do not believe the job-ber has progressed as rapidly as he should. I do not believe that the manufacturer knows quite today just what his sales problems are for the next five years because of the unsettled condition and the changes that have come as a result of the intense vacation of the buying public.

There are 105,000,000 people in the country and only 7% of them have an income of \$3,000 a year or over. That brings 105,000,000 down to 7,350,000 legitimate prospects for the purchase of \$10.15 per car, and that is perhaps the final point in that array of figures.

Are you studying the methods of retailing? Without trying to preach against orthodox methods, I am somewhat interested in knowing more about cooperative stores and about the mail order situation and 5, 10 and 25-cent stores. I believe that the jobbers should particularly study those three methods of merchandising and find out what are the reasons for their success.

Lines are going to be cut down some-what more I believe in 1923. The manufacturers certainly are going to cut lines and I believe the jobbers are too.

Here's just one thing more. I believe that this Association has possi-bilities. I wish we might elicit more information of our experiences. Most statistics are simply experiences. Of course, that is all they can be. We could gain a great deal by exchanging experiences. There is some legal limitation to the operation of our associations, and yet there is no question but what Mr. Hoover has favored organi-zation. I would like to see the Acceszation. I would like to see the Accessories Branch of the Hardware Association get down and give us some real help because we need it so much.

The Chairman then introduced M. H. Tisne, of A. Schrader's Sons, Incorporated, Brooklyn, New York, who spoke as follows on the subject of "Sales Possibilities."

#### Extracts From Address by M. H.

Instruct your salesmen to be on the lookout for necessary things that are absent from the cars that drive up to your door. You will find that it opens up sales possibilities that bulk large in volume and yield much in good will.

The Chairman introduced H. Stone, of the Automotive Products Corporation, Hazleton, Pennsylvania, who spoke as follows on the subject "The Relationship of the Sales Manager of the Manufacturer and the Sales Manager of the Wholesaler".

The Branch then took a recess until Tuesday morning at 9:30 o'clock.

The Tuesday morning session was opened with a discussion on "Hardware and Automotive Distribution Channels," led by H. D. Laidley, of the Federal Miniature Lamp Division of the General Electric Company, Chicago.

The next discussion was on "Should Not all Accessories Be Sold F. O. B. Wholesalers, City, or with Proper Freight Allowance?" led by L. C. Webb, Lee Hardware Company, Salina, Kansas.

#### Webb Tells Manufacturers to Shoot Straight and Play Game Fairly.

The question, "Should not all accessories be sold f.o.b. wholesaler's city or with proper freight allowance?" can have but one answer from the jobber if weighed from the standpoint of service, and both jobbers and manufacturers seemed to have agreed that "Service" is the only reason for the existence of jobbers or distributors.

If this be true, then our first service should be to the retailer for in serving him we open up the proper avenue of distribution and help to keep it open. I believe that the greatest need of business today is that the retailer be given as much support as is given to the manufacturers.

The natural way of distribution is through the individual retail stores of this country and if they prosper, the jobber and manufacturer will prosper. If they fail, then the jobber must cease to exist and the plan of merchandising be revolutionized.

The jobbers of this country are now undergoing a crucial test and it is largely up to them as to the outcome. I firmly believe that many jobbers and manufacturers must go, and that the time is now close at hand when it will be a "survival of the fittest." The jobber who believes that the only way to get business is to sell without a profit and the manufacturer who believes that it is good policy to sell the jobber and then secretly slip around the corner and sell the jobber's customer at the same price will be the first ones who will cease to exist. Right is always right,

and sound business methods always win. There is a plan which, if followed, will improve conditions and help to stabilize the nervous lack of confidence so manifest today. It is all summed up in one word, and that word is cooperation -cooperation between manufacturer,

jobber and retailer.

The jobber wants and has a right to the manufacturer to expect straight and play a fair game. Much distrust has been caused by manufac-turers selling to retailers at the same price as that given to the jobber and in many instances this is done after the iobber's order is taken and is not known by the jobber, until he calls on the retailer with a sample for the purpose of trying to get an order at a reasonable profit. The manufacturer either believes that the jobber is helpful and that he needs his services or he does not, and be should either be one hundred per cent for him or refuse to recognize the ne-

cessity of wholesalers.

The manufacturers and the jobbers can get much closer together if they will, and when they do more satisfactory conditions will exist. One way for the manufacturer to make the jobber his real representative is by putting every jobber on an equality in the matter of distributing his line by having one price for all and one profit for all which makes it necessary to price all merchandise f.o.b. wholesaler's city. This would enable any jobber to serve his own territory at a margin of profit equal to that of his competitor. Many manufacturers have adopted this policy and I do not believe any jobber would want them to change.

"The Percentage of Hardware Dealers at Present Handling Automobile Supplies," was the topic of a discussion led by Glover S. Colladay, of the Frank Colladay Hardware Company, Hutchinson, Kansas.

#### Says Small Percentage of Hardware Stores Sell Accessories.

It so happens that one of the heads of our concern has, in the past few months, been over a large percentage of our territory, covering it in company with different men of our sales force. When asked the question, he told me, without hesitancy, that the approximate percentage of the hardware dealers carrying accessories, on the territories he had just covered, was less than 10%. As he was over three-fourths of our entire territory, this percentage, therefore, would hold good for it all, and I think this same condition applies to the different trade territories of all the jobbers here represented.

Now, if the latter condition exists, whose duty is it to wake the hardware retailer up? Naturally the hardware jobber, for he is the first to profit by

such an awakening.

Conceding this to be the case, it would seem to me that the logical thing for the hardware jobbers, individually and collectively as an association such as ours, to do is to start a system of education and propaganda with the hardware retailers to influence those who do not now carry automobile accessories to put in a reasonable stock, and induce the dealer, who now goes after this business in a half-hearted manner, to take it more seriously.

My observation is, however, that in order to get in this line right, the dealer must departmentize it the same as the jobber. In other words, he should han-dle it just like he does his tin ship, plumbing department, paint or furniture department, or any other department of his business. The average hardware man, throughout the country, thinks nothing of having a tin shop in connection with his hardware store, and hires a tinner to handle it. The same thing applies to his plumbing department; he would hire a plumber to handle that department.

So why not go into the auto supply business, with a machine shop in con-nection, and hire a mechanic? So that he may not only sell the items which the car owner will put on himself, but also sell him articles which must be applied by a mechanic, and in this way he would not only secure the profit on the sale of the article itself, but also a profit on the

cost of application as well.

I know of two or three hardware dealers, in various sized towns on our territory, who have handled their auto supply business in just this way, and they who have handled their auto say that it has been a paying proposition for them. In the smaller towns the dealer can even go so far as to sell gasoline and oil, which, although it may not bear such a great percent of profit, runs into considerable volume, which all helps to reduce the overhead.

Now, when you stop to consider that the possible net volume of the auto sup-ply business to the hardware dealer is considerably larger than either the tin shop, plumbing, paint or furniture de-partments of his business, it would seem to me that he is very foolish in passing

it up.

If I were a hardware dealer today, in a town of anywhere from five hundred to fifty thousand people, I would most certainly put in an auto supply department, and have a repair shop with a mechanic in charge. The accessories could be sold over the counter by the regular hardware salesman, and the mechanical end of the job could be handled in a machine shop by the mechanic. This machine shop would very easily pay for the expense of maintaining it, and would be the means of the sale of a good many accessories that could not be sold otherwise by the hardware dealer.

If the hardware dealer does go after the automobile accessory business in an intelligent and energetic manner, you will not find the great number of small accessory dealers and machine shops carrying supplies, who sooner or later go broke, and cause the jobber grief.

"What Is Cash Discount?" furnished the theme of a discussion led by John E. Lambert, Clayton and Lambert Manufacturing Company, Detroit, Michigan.

#### Extracts from Address by John E. Lambert on Cash Discount.

Cash discount, or a discount for cash, is a premium given to the purchaser for paying spot cash for the merchandise he purchases. The period in which a cash discount may be taken is usually limited to ten days. The reason for giving ten days in which the cash payment can be made is to enable the seller to put into the hands of the purchaser a bill of sale and bill of lading, constituting delivery to the buyer of the article sold. It is expected, in order to earn this cash discount, that the buyer will see that check is sent within the discount period.

In order to definitely settle in our own minds whether this is really a cash discount or whether it is simply a deduc-tion made which had been previously added to the cost or selling price of the article, we must look into the reasons the seller may have for offering the discount, the cost to the seller for allowing the discount, and what the seller stands to gain by giving the discount. When we have fully answered and analyzed these questions we will know more about what cash discount is.

Let us consider first the cost of the discount to the seller. We will say that he has allowed 2% cash discount for payment within ten days from date of

sale. Inasmuch as the stock sold is shipped over a more or less extended territory, allowing for mail delays, the receipt of the cash by the seller from the buyer will average fifteen days from date of sale. He, therefore, has allowed a discount of 2% for payments which have reached him within fifteen days of the date of sale. If his net terms are thirty days, the casn discount at lowed equals interest at the rate of 4% lowed equals interest at the rate of 14% lowe per month on the sale discounted. his net terms are sixty days and his discount is 2% ten days, bringing him his money in fifteen days, his interest then has been 2% for forty-five days' prepayment, making the discount allowed equal to interest at the rate of 16% per year.

You will see, therefore, that in offering a cash discount to the buyer, the seller is offering interest at the rate of 16% to 48%, which is an extraordinary inducement to the buyer to pay within discount time. It goes without saying, therefore, that when the buyer elects to take a cash discount, he should take it within the discount period agreed upon in the purchase, thereby giving the seller a chance to use the money with profit

to himself.

In order to better judge whether it is more than can be given out of the profits on the sale, or whether part or all of the discount must be added to the cost or not, we must look at the probable results when discount for cash is not allowed and the condition when it is.

Consider the net terms first. This would mean, on a sale of three hundred thousand dollars per month, that ac-counts receivable would probably be in excess of six hundred thousand dollars and the buyers would be obtaining their needs for three months before the seller would begin to press for payment. This must of necessity increase the amount of accounts receivable and also greatly increases the chance of loss through failure of customer. It also makes it possible for the buyer to use money received from the sale of merchandise purchased of you to discount purchases made from others, and limits the possible volume of business that can safely be done on the capital invested.

We have looked at the principal bad points of a net terms proposition, which in a large measure offset the cash discount allowed for prompt cash. Now let us look at the probable result of a real cash discount when applied to the same business, and we will readily see where it pays the seller to allow it.

It enables him to check up on condi-It enables him to check up on condi-tions prevailing in his territory and by close attention he may avoid allowing too large an increase of credit in any part of it. He can also increase his volume without increasing his capital investment or reducing his bank loan.

To illustrate, say the sales are three hundred thousand dollars per month. If 2% ten day cash discount is given, where regular terms are 30 and 60 days net and only 25% of the trade discount their bills, you will receive seventy-five thousand dollars of this amount each month, reducing accounts receivable to two hundred and twenty-five thousand dollars which, in two months, will likely be less than four hundred and fifty thousand dollars, and you have been able to reduce your bank line that much or avail yourself of the many similar discounts on your own purchases that have been passed up for lack of funds, or you are able to increase the volume of business with little or no added cost of overhead which results in added profit on all sales made and also adds all of the profit on the extra volume.

In addition to this it quickly sorts out and points out to the seller the most desirable customers and as quickly shows him who must be watched or who must be denied credit, and he is also sure that the money received from the sale of his stock by the buyer will not be diverted and used to discount other bills while he waits indefinitely for the money his due.

his due.

The evidence pro and con is now before you so that you can form your own conclusion as to which system will result in most profit with safety to you and your stockholders. If your verdict is in favor of 2% 10 day cash discount, then I agree with you. The same facts apply to a manufacturer's business who distributes his product through a jobber. distributes his product through a jobber, except that in the manufacturer's case a much larger per cent of his customers discount their bills, making it possible for the manufacturer to do a larger volume of business which materially cuts down the fixed overhead costs represented by his investments in buildings and equipment.

Now let us look at a cash discount that is not a discount for cash. to the terms used largely by makers of automobile supplies: namely, 2% dis-count for cash the 10th of the following The prevailing understanding is that materials sold on these terms are not thirty or sixty days, therefore part of September bills would average due the 15th of October, still the buyer is allowed 2% discount if paid on the 10th, and the seller seldom receives his check before the 15th when all the bills average to be due.

In my opinion, this 2% is not a cash discount but is a further discount from purchase price and the only help it is to the seller is any little saving in collec-

tion trouble he might have. Can any fair-minded man conclude that 2% the 10th of the following month is a real cash discount and that it has not been added together with the seller's additions for interest and credit risk to the price that the seller would conclude was fair on terms 2% 10 days?

In order to get another view of this matter, let us say that everything we buy and everything we sell can be purchased or sold on terms 2% tenth of the following month.

This will mean that we will have one day each month in which all the last month's invoices are to be paid and that if we avail ourselves of the cash discount on our purchases, we must pay these bills before we receive the cash from the sales that we have made, otherwise we must hold up our payments until we do receive these payments, and if we all wait to receive the other fellow's check before paying our own bills, we are all out of luck.

There is no dodging the point that if these terms were universal and payments were made strictly in accordance with these terms, that it would require a much larger capital or we would all be borrowing short time money to en-able us to take our discounts and do the business we are doing now under our

present system.
On the other hand, terms thirty days, 2% if paid within ten days of their date, bring money every day in the month from discounts and matured accounts, which enable you to pay or discount the purchases that you make and keeps the

money moving. We cannot help but agree that the risk is greatly multiplied where terms of 2% the tenth of the following month, or longer than 2% ten days, prevail.

I trust that we may have a full and free discussion on this subject as there are numerous angles affecting it that I have not attempted to cover.

The session concluded with a discussion led by J. H. Ganzer, Duluth Show Case Company, Duluth, Minnesota, on "Inducing the Retailer to Properly Display Accessories."

#### Pennsylvania System Furnishes De Luxe Train for Chicago Delegates and Friends.

Counterpart of Famous Broadway Limited Makes Run in Fine Manner Under Direction of T. R. Wilt.

T was a merry bunch of hardwaremen and hardware women that left on the Pennsylvania special train at Chicago Sunday afternoon at 5:30. Nearly one hundred passengers were on board and all thinking of the good time they were going to have on their way to the Atlantic City conventions.

The train was a counterpart of the famous Broadway Limited and the service was excellent and great credit is due to T. R. Wilt, the special representative of the Pennsylvania Railroad, who was in charge of the train, for the manner in which every plan for the comfort of the passengers and the safety and speed of the journey was carried out.

Before the train was outside of the Chicago limits, small groups had been formed impromptu songs, story telling, bridge and other games were enjoyed, and the time sped by so fast that before any one realized it, bed time came around.

Monday's ride was shortened by the beautiful scenery and while when the train rolled into Atlantic City about 6 p. m., many were glad to disembark, they were all a unit in praising Mr. Wilt and the Pennsylvania Railroad.

The list of the travelers follows: Car 435.

R. A. Sandvahl, Corbin Screw Corporation, Chicago.
Mr. and Mrs. F. S. Kretsinger, American Fork and Hoe Company, Evanston, Illinois.

Paul Crissey, Edward Katzinger Com-

pany, Chicago. M. E. Wyckoff, Hardware Age, Chi-

Mr. and Mrs. J. A. Roberts, Pittsburgh Steel Company, Chicago.

A. E. Alverson and C. L. Clark, reenlee Brothers and Company, Greenlee Rockford, Illinois,

#### Car 436.

J. C. Kayner and C. A. Channell, Channell Chemical Company, Chicago. Mr. and Mrs. J. D. McCue, Russell and Erwin Manufacturing Company,

Chicago. F. S. Rost, William Frankfurth Hardware Company, Milwaukee, Wisconsin. A. S. and H. A. Vaughan, Vaughan and Bushnell Manufacturing Company,

Chicago. Mr. and Mrs. W. S. Brown, Brown-

Camp Hardware Company, Des Moines, H. C. Woodside, Northwestern Barb

Wire Company, Sterling, Illinois.
W. H. Foege and J. M. Holloway,
American Steel and Wire Company, Chicago.

Clarke Coit, Lee-Coit-Andreesen Hardware Company, Omaha, Nebraska.
C. F. Silvester, Winchester Repeating
Arms Company, Chicago.
A. W. Murphy, National Enameling
and Stamping Company, Milwaukee,

Wisconsin.

Mr. and Mrs. H. J. Grosscup, Lovell Manufacturing Company, Chicago.

#### Car 437.

Mr. Worcester, Milwaukee, Wisconsin. G. B. Richards, Richards and Conover Hardware Company, Kansas City, Missouri.

G. J. Kastenberg, Standart Brothers Hardware Corporation, Detroit, Michi-

D. R. Ziegler, Drake Hardware Com-

D. R. Ziegler, Drake Hardware Company, Burlington, Iowa.
N. G. Ballantyne, Burlington, Iowa.
C. A. Minot, Hunt-Helm-Ferris Company, Harvard, Illinois.
B. H. Lancaster, Nelson Manufacturing Company, Chicago.
J. C. Schuele, Reynolds Wire Company, Divon Illinois

pany, Dixon, Illinois. A. C. Taylor, Eagle Lock Company,

Chicago.
R. S. Preble, Ajax Auto Parts Company, Racine, Wisconsin.
J. L. Donnelly, Western Cartridge Company, East Alton, Illinois.

R. L. Rogers and Preble Harris, Payson Manufacturing Company, Chicago.
Miss Etta Cohn, American Artisan

AND HARDWARE RECORD, Chicago.
Miss C. Holloway, Kansas City, Missouri.

Mr. and Mrs. G. W. Jones, Pitts-

burgh Steel Company, Chicago.
H. G. Reynolds and J. G. Ralston,
Reynolds Wire Company, Dixon, Illi-

#### Car 438.

A. C. Clendenning, Keytone Steel and Wire Company, Peoria, Illinois.

Mr. and Mrs. W. F. Pagel, Turner Brass Works, Sycamore, Illinois.

E. L. Empkie, Empkie-Shugart-Hill Company, Council Bluffs, Iowa.

R. W. Blanchard, Hart and Cooley Company, Chicago.

F. S. Baker, North Pier Terminal Company, Chicago.

F. J. Koch, McKinney Manufacturing Company, Chicago.

J. A. Warner, Wyeth Hardware and Manufacturing Company, St. Joseph,

Mr. and Mrs. A. J. Klein and Mr. and Mrs. H. B. Wilson, Mathias-Klein and Sons, Chicago.

Mr. and Mrs. Charles H. Pickens, Paxton and Gallagher Company, Omaha, Nebraska.

Mr. and Mrs. R. Tenk and Miss Pauline Tenk, Tenk Hardware Company, Quincy, Illinois.

#### Car 439.

F. F. Luedke, Pretzlaff Hardware Company, Milwaukee, Wisconsin.

C. E. Parr and A. E. Foley, Coleman Lamp Company, Wichita, Kansas.

J. H. Christman, Milwaukee Corrugating Company, Milwaukee, Wisconsin. E. N. Birge, St. Louis Shovel Com-

pany, St. Louis, Missouri.
W. P. Myers, Harper and McIntire
Company, Ottumwa, Iowa.

Mr. Jellings, Emil Newby and E. O. Faeth, Stowe Supply Company, Kansas City, Missouri.

City, Missouri.
Mr. and Mrs. G. W. Huntley, Cutler
Hardware Company, Waterloo, Iowa.
P. F. Nichols, Apex Electric Manufacturing Company, Chicago.
G. S. Colladay, Colladay Hardware
Company, Hutchinson, Kansas.
J. C. Kroner, Fred Kroner Hardware

Company, LaCrosse, Wisconsin.
Mr. and Mrs. L. E. Johnson, and H.
M. Newberry, Newberry Hardware
Company, Alliance, Nebraska.
H. M. Johnson and F. G. Wooster,
F. G. Wooster and Company, St. Louis,

Missouri. J. Walworth and H. E. Arnold, Rome Manufacturing Company, Chicago. M. J. Lacey, Corning Glass Works,

Jefferson, Wisconsin.

#### Car 440.

J. P. McKinney and W. A. Scott, Mc-Kinney Manufacturing Company, Pitts-

burgh, Pennsylvania.
J. C. Trier and C. C. Schlatter,
C. C. Schlatter Company, Fort Wayne, Indiana.

W. H. Klauer, Klauer Manufacturing

Company, Dubuque, Iowa. G. E. Larson, Larson Hardware Com-

pany, Sioux Falls, South Dakota.

W. E. Ericson, Biflex Products Company, Waukegan, Illinois.

H. O. MacDougall, Buffalo Forge Company, Chicago.

Mr. Hartlein, Gemco Manufacturing

Company, Milwaukee.
D. O. Macquarrie, Corbin Cabinet

Lock Company, Chicago.
C. H. Casey, President National Retail Hardware Association, Jordan, Minnesota.

R. A. Peterson, H. P. Sheets, and Mrs. H. H. Riner, National Retail Hardware

Association Office, Argos, Indiana. J. Hoffman, J. Hoffman and Sons, J. Hoffman, Milwaukee, Wisconsin.

#### New York City Hardwaremen Hear Fine Talk on Selling.

At the monthly meeting of the Hardware and Supply Dealers' Association of Manhattan and Bronx Boroughs, New York City, held Tuesday evening, October 17th, J. T. Lange, Manager of the Educational Division of the house of A. W. Shaw Company, publishers of System and other high class business papers, gave a very interesting address on "Constructive Salesmanship."

The Association is conducting an aggressive campaign against manufacturers selling both to consumers and dealers.

#### Coming Conventions

Western Implement, Vehicle and Hardware Association, Kansas City, Missouri, January 16, 17, 18 and 19, 1923. H. J. Hodge, Secretary, Abilene, Kansas.

Texas Hardware and Implement Association, Dallas, Texas, January 23, 24 and 25, 1923. A. M. Cox, Secretary, 822 Dallas County Bank Building, Dallas, Texas.

Mountain States Hardware and Implement Association, Denver, Colorado, January 23, 24 and 25, 1923. W. W. McCallister, Secretary-Treasurer, Boulder, Colorado.

Kentucky Hardware and Implement

Kentucky Hardware and Implement Association and Exhibition, Jefferson County Armory, Louisville, Kentucky, January 23, 24, 25 and 26, 1923. J. M. Stone, Secretary, Sturgis, Kentucky. West Virginia Hardware Association Convention and Exhibition, Huntington, West Virginia, January 30 and 31, and February 1, 1923. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio. ton, Ohio.

South Dakota Retail Hardware Association, Sioux Falls, South Dakota, January 16, 17, 18 and 19, 1923. H. O. Roberts, Secretary, 1120 Metropolitan Life Building, Minneapolis, Minnesota.

Idaho Retail Hardware and Implement Dealers' Association, Boise, Idaho, January 31, February 1 and 2, 1923. E. E. Lucas, Secretary, Hutton Building, E. Lucas, Secretary, Spokane, Washington.

Indiana Retail Hardware Association Convention and Exhibition, Indianap-olis, Indiana, January 30 and February 1 and 2, 1923. G. F. Sheely, Secretary. Argos, Indiana.

Oklahoma Hardware and Implement Association, The Auditorium, Oklahoma City, Oklahoma, January 31, February 1, 1923. W. A. Clark, Secretary-Treasurer, 209½ West Main Street, Oklahoma City, Oklahoma.

Nebraska Retail Hardware Association

tion, Convention and Exhibition, February 6 to 9, 1923, Omaha, George H. Dietz, Secretary-Treasurer, 414 Little Building, Lincoln, Nebraska.

Michigan Retail Hardware Conven-

tion and Exhibition, Grand Rapids, February 6, 7, 8, 9, 1923. Karl S. Judson, Exhibit Manager, 248 Morris Avenue, Grand Rapids. A. J. Scott, Secretary, Grand Rapids. A. J. Marine City, Michigan.

Virginia Retail Hardware Association, Norfolk, Virginia, February 7, 8 and 9, 1923. Thomas B. Howell, Secretary, Richmond, Virginia.

Wisconsin Retail Hardware Association, Milwaukee Auditorium, Milwaukee, Wisconsin, February 7, 8 and 9, 1923. P. J. Jacobs, Secretary, Stevens Point, Wisconsin. George W. Kornley, Manager of Exhibits, 1476 Green Bay Avenue, Milwaukee, Wisconsin. Pennsylvania and Atlantic Seaboard

Pennsylvania and Atlantic Seaboard Hardware Association Convention and Exhibition, Philadelphia Commercial Museum, Philadelphia, Pennsylvania, February 12, 13, 14, 15 and 16, 1923. Sharon E. Jones, Secretary, 1314 Fulton Building, Pittsburgh, Pennsylvania. Ohio Hardware Association Convention and Exhibition, Cleveland, Ohio, February 13, 14, 15 and 16, 1923. Exhibition in the new Municipal Hall. James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio.

James B. Carson, Secretary, 1001 Schwind Building, Dayton, Ohio. Illinois Retail Hardware Association Convention and Exhibition, Hotel Sher-

Convention and Exhibition, Hotel Sherman, Chicago, Illinois, February 13, 14 and 15, 1923. L. D. Nish, Secretary-Treasurer, Elgin, Illinois.

Iowa Retail Hardware Association Convention and Exhibition, Des Moines, Iowa, February 13, 14, 15 and 16, 1923.

A. R. Sale, Secretary, Mason City, Iowa.

North Dakota Retail Hardware Association Association Association Convention and Exhibition, Des Moines, Iowa, Iowana Association Association

North Dakota Retail Hardware Association, Grand Forks, North Dakota, February 14, 15 and 16, 1923. C. N. Barnes, Secretary, Grand Forks, North

Missouri Retail Hardware Association Convention and Exhibition, Planters Hotel, St. Louis, Missouri, February 20, 21 and 22, 1923. F. X. Becherer, Secretary, 5106 North Broadway, St. Louis, Missouri.

Minnesota Retail Hardware Association, Duluth, Minnesota, February 20, 21, 22 and 23, 1923. H. O. Roberts, Secretary, 1120 Metropolitan Life Building, Minneapolis, Minnesota.

New England Hardware Dealers' Association Conventions

New England Hardware Dealers' Association Convention and Exhibition, Mechanics' Building, Boston, Massachusetts, February 21, 22 and 23, 1923 George A. Fiel, Secretary, 10 High Street, Boston, Massachusetts.

New York State Retail Hardware Association Convention and Exposition, Rochester, New York, February 20, 21, 22 and 23, 1923. Headquarters, Powers Hotel. Sessions and Exposition at Expos

Hotel. Sessions and Exposition at Exposition Park. John B. Foley, Secretary, City Bank Building, Syracuse. New York.

Hardware Association of the Carolinas, Columbia, South Carolina, May 8, 9, 10 and 11, 1923. T. W. Dixon, Secretary-Treasurer, Charlotte, Dixon, Secretar North Carolina.

Arkansas Retail Hardware Association, May, 1923. (Place to be announced later.) L. P. Biggs, Secretary, 815-816 Southern Trust Building, Little Rock, Arkansas.

National Retail Hardware Associa-tion, Richmond, Virginia, June, 1923. Herbert P. Sheets, Secretary-Treasurer,

Argos, Indiana.
Southeastern Retail Hardware and Implement Association, covering Tennessee, Alabama, Georgia and Florida. (Date and place to be announced later.)
Walter Harlan, Secretary-Treasurer, 701 Grand Theater Building, Atlanta,

### Suggestions and Plans for Window Displays.

### Instructive Examples from Exhibits in AMERICAN ARTISAN AND HARDWARE RECORD Window Display Competition.

### Manufacturer's Display Plus Merchant's Personality.

Anyone can use a prepared window display—although not everyone is wise enough to profit by the fact. A few people, also, can take the natural facilities they have at hand and turn out a drawing storefront. But very, very few can combine both natural and prepared display factors in such a manner as to merit attention.

The accompanying illustration

woven into the wire, making a solid background.

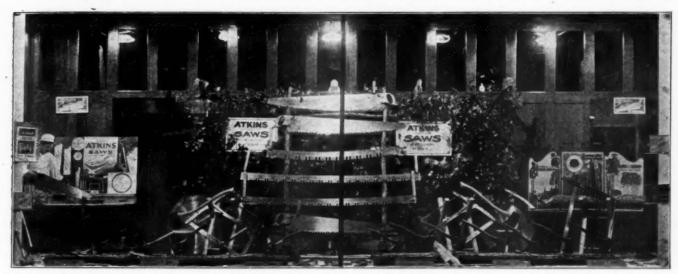
"The easel upon which the cross cut saws rested was made of five pieces of hickory, nailed together.

"The floor was covered with fine shavings and sawdust. This display was made in November and very good results were obtained from same."

No one could look at the photograph without expecting exactly the "good results" which Mr. Clark described. The whole thing is so well into the interior of the store. The lighting is good. The "balance" of the window-picture is exceptional. It is particularly well carried out in the line of different sized axes driven into the log in the foreground.

There are hardware men who answer all arguments in favor of manufacturer's aid with some such remark as:

"O, I guess I can make my own window displays. I don't want somebody in Rochester telling me



Real Window Display Cooperation, Devised by A. L. Clark for Jordan Hardware Company, Willimantic, Connecticut.

showing a window display of the store of the Jordan Hardware Company, Willimantic, Connecticut, is an example of masterly accomplishment of this difficult feat. The designer of the window, as will be seen, has made excellent and consistent use of the manufacturer's boards. But he hasn't stopped there. He has given him a setting which enhances their value at least 100 per cent.

A. L. Clark, who is responsible for the window, writes how he did it, as follows:

"The setting for the window was secured from the woods. The background was made of four slabs nailed together with poultry netting stretched across and oak leaves worked out and conveys so effectively the spirit of the woods and approaching winter that it was certain to be a success.

There are a few details, however, which the writer has modestly refrained from pointing out—without which the value of the display would not be ruined, but would be considerably impaired.

It will be noted, for instance, that the Jordan Hardware Company, unlike many stores, has realized the necessity of installing a series of background panels for its window. Nothing expensive, probably, but just what is needed to set off the display.

The glass panels at the top are well advised, transmitting daylight how to decorate my store front."

This Jordan show window should be instructive to this type of merchant. The designer has used all the manufacturer gave him, to be sure, but has he sacrificed his own individuality?

#### South Dakota Hardware Men Will Meet at Sioux Falls.

The Annual Convention of the South Dakota Retail Hardware Association will meet January 16, 17, 18 and 19, 1923, at Sioux Falls.

An Exhibit of hardware, stoves, etc., will be an important feature of the convention, which will be held in the Coliseum. H. O. Roberts, 1120 Metropolitan Life Building, Minneapolis, Minn., is Secretary.

### Study and Interpretation of Advertisements.

You Can Make Your Advertisements More Gainful by Avoiding the Faults and Profiting by the Good Qualities of Others.

In a nice, clean-looking bit of seven-inch display, the Perrin Hardware Company informs the people of Ashland, Wisconsin, that it carries tools, cooking ware, and paint. The ad is calculated to make a good impression. Whether it would logi-



For Amateur or Craftsmar Every worthwhile tool for Carpenter, Farmer, Mechanic etc.; comprises our present stock.

COOKING WARE We have the best and mos' practical housekeeping help:

that are manufactured. PAINT

For indoor or outdoor use Our line of Paints and Varnishes are not excelled by any other in Ashland.

#### PERRIN HARDWARE COMPANY

101 East Second St. \*\*\*\*\*\*

cally produce a run on tools, cooking ware and paint, is another question. As in so many other ads, no mention is made of prices—the one thing requisite to awaken interest in buyers.

These things are seemingly trivial, but they produce an accumulative effect which often means the difference between success and failure.

A good example of timely display is the accompanying two-column, four-inch advertisement by the Horn Hardware Company, Sandusky, Ohio. Sandusky is hardly the center of a hunting country, but the Horn people evidently know

Manchester, Indiana, that they can use his help in getting ready for the winter. The subjects of heating

### Hunters' Supplies

The season is on and we can supply your wants at a regular saving.

STEEL TRAPS, SHELLS, GUN CASES, HUNTING TROUSERS, CAPS ETC.

Complete Stock of MAZDA LAMPS

### Horn Hardware Co.

"THE HOUSE OF GREAT SAVINGS"

WALTER A. HORN.

WM. LUNDY.

CARL A. HOBERT

that, whatever the surroundings, there are a certain number of men who must get out into the crisp, invigorating air every fall and tramp for hours in pursuit of game.

Several methods suggest themselves, however, by which the form of the ad might be improved. A plain border, more white space, statement of a price or two, and the omission of the unrelated subject of Mazda lamps-any or all of these would help. The makeup, also, indicates that the printer who set the ad has a few things to learn.

"One of the big secrets of advertising," said the veteran copy-writer, "is to hit the right thing at the right time. In other words, don't advertise a snow shovel in July."

In a well-worded advertisement. two columns by six and one-half inches, Frames' Hardware Store suggests to the buyers of North

and general home repair work are well covered. Automobile tires are something else that the driver who doesn't like to change in the snow

#### Get Ready for Winter

them now, don't wait till you need them. We can furnish repairs for all kinds and makes that will fit.

Put in the glass that is out. You can get

If your roof or valley leaks get a can of Storm King Asbestos Cement. You can fix it right and at a small coat.

These cool mornings and evenings a good Coal Oil Heating Stove will be a comfort. The Barler Ideal Oil Stove will not smoke or smell. They have a brass fount and will not leak or rust.

We have several styles of Electric Heating Stoves that will heat a bath room and your house comfortably. These are not expensive and are very practical.

KOKOMO TIRES give you good service and our prices save you money. We have

FRAMES' HARDWARE STORE THE WINCHESTER STORE

can afford to think about at this time of year. The ad is unusually well constructed typographically.

### Facts of Warm Air Heating and Ventilating.

Reports of Progress in Warm Air Heater Research Work. Ventilating Factories, Theatres and Other Buildings.

Here Is an Easy Way to Clean Furnace and Flues from Soot.

The accumulations of soot which frequently clog the flues of warm air furnaces and boilers and start fires may be taken care of in this manner.

The fire is put into good condition with a substantial body of hot fuel. Common salt, thoroughly dried is then thrown or sprinkled onto the incandescent fuel bed in a quantity depending entirely on the size of the furnace. In the case of a house heating furnace one pound at a time is ample, four or five scoops full may be required. The dampers are kept open so as to maintain the furnace temperature.

Immediately upon charging the

salt the furnace becomes filled with dense white fumes which may require as much as half an hour to entirely disappear. If results are not secured on the first application, it should be repeated as many times as necessary.

Once the heating surface is thoroughly cleaned a small application every few days is usually sufficient to keep it so.

Everyone using soft coal is urged to use this remarkably simple and cheap process of getting rid of the soot, cleaning and heating surfaces of boilers, thus saving large amounts of coal, preventing fires from chimneys and generally conserving all along the line of heating and the production of power.

words, produce an efficient heat transfer within the furnace itself.

The furnace is always forced, in order to heat the room in which the circulation is the most sluggish, because this room becomes the cold room, and the cold room is the one by which the heating of the house is gauged, as well as the efficiency of the heating plant determined.

An intensified and sensitized circulation through the furnace jacket is the cure for this prevalent condition in warm air furnace heating. A circulation that is practically constant, being in existence even during intervals of banked fire, and a circulation that is positive enough, that is, has sufficient volume and static pressure to cause an adequate air displacement through all the ducts of the warm air furnace installation, assures a uniform heat condition throughout the entire house without the necessity of forcing the fire.

The furnace fan, on which I have spent something over ten years in development, is the answer, as I view it, to this condition; 1,500 cubic feet of air per minute forced through the casing of the warm air furnace produces a far greater heat interchange from the radiating surfaces of the furnace than does any gravity system, and this causes a very marked drop in stack temperatures. I have found by repeated tests that I can treble the capacity of a given size of furnace.

Moreover, when a furnace is equipped with a furnace fan, the need of opening wide the drafts on a cold and windy day and of forcing the fire, as is the condition in a great many furnace installations, is entirely obviated, as the house can be uniformly heated, due to the positiveness of the circulation and its constancy of action.

The fan is a disc fan 25 inches in diameter, composed of six blades,

### Furnace Equipped with a Fan Will Perfect Distribution of Warm Air.

Temperature of Air at Outlets Will Be Materially Lower, Yet Rooms Will Be More Comfortable.

Written Especially for American Artisan and Hardware Record by Nathaniel Butler Wales, Dowagiac, Michigan.

THE mechanical fan system of heating is recognized by engineers and the general public as the highest development of the art of properly warming and conditioning the air in a building. It occurred to me some years ago that the warm air furnace system of heating had not reached its fullest expression, that is, it had not attained and made use of all the possibilities which it should have, in view of the competition of steam and hot water. In short, the warm air furnace is a mechanical fan system with the fan left out. The leaving out of the fan, or means of positively circulating air to all the various points of distribution, has militated against the warm air furnace as a heating system, because uniformity of heating could not be

obtained in all kinds and conditions of weather.

If anyone makes a careful investigation of the actual temperatures of the gases of combustion at the point of their entry into the chimney from the furnace he will find that they are inordinately high in any furnace heating system during the greater part of the heating season. This means that in order to adequately heat certain rooms in furnace installations, the fire is so forced in the combustion chamber that the furnace as a heating system is most inefficient, due to the fact that the heating surface available within the furnace to heat the air passing through the casing is insufficient to properly produce a heat transfer to such an extent as to give low stack temperatures; or, in other

and is operated by a small low pressure steam motor having two double acting cylinders 15%-inch bore by 11/2-inch stroke. The normal steam pressure is 10 pounds and the average rate of fan revolution is 300 per minute. A small heating element has been designed to be positioned within the firepot of any make or size of warm air furnace.

gine casing. These two condensing surfaces condense the steam which falls into the water sump wherein it feeds the water pump and is again forced through the circuit.

One of the condensing surfaces heats a small body of water which is automatically maintained at a certain level in a cast iron receptacle. This water gives off a vapor which

The engine is self-starting and entirely automatic in every way. A gallon of lubricating oil is poured in the engine case at the beginning . of the heating season and is positively forced into the three engine bearings which are all that there are in the simple type of engine which I have developed for driving the fan. After months of continuous operation no wear has been found on the bearings, excepting .001 inch, which wear occurred during the work-in of the engine. The cold air duct can be connected to the suction side of the fan, at the bottom, either side or the top, and it has been found that one cold air duct is all that is necessary as the static pressure produced in the system gives a heat defusion which is instantly noticed as one of its predominating characteristics.

The fan unit is not an expensive one and its cost in installation on new jobs can be largely absorbed in the simplified installation system required.

There are thousands and thousands of "Lame Duck" warm air furnace installations wherein this furnace fan would instantly change the uncertainty of their circulation and transform them into positive and economical heating systems."

Sectional View of Fan Equipment for Warm Air Furnace.

1 and 2. Water Inlet and Outlet to

- Range Boiler. Engine Housing and Sump. Water Supply to Humidifier. Outlet for Humidified Air.
- Outlet for Water to Heating Element. Steam and Water to Engine.

This heating element is supplied by a predetermined volume of water forced into it stroke for stroke of the engine by a little pump having a stroke of 3/8 inch and a bore of 5/8 inch. The working fluid, or steam, is not saturated under normal firing conditions, but is composed of some 40% of water. This steam after passing through the engine is passed over two distinct condensing surfaces within the enAir Circulating Fan.

8. Air Circulating Fan.
9. Heating Absorbing Element.
10. Cold Air Inlet, May Be Connected at Top, Bottom or Sides.
11. Firepot of Furnace.
12. Warm Air to House Register.
13. Cold Air Register.

supplies automatically the humidity content for the installation. The other condensing surface heats the water for domestic purposes. In this manner the heat rejected by the small low pressure steam engine is effectively utilized and the same water is used over and over again in the little steam power circuit, thus making it impossible for the heating element within the firepot to corrode or fill up with mineral

#### Can You Help Solve This Boiler Query?

To AMERICAN ARTISAN:

Would you please explain to me if I could connect two tanks to the same pipe system. For example, one 30-gallon tank is connected now to laundry stove and I want to connect a 66-gallon tank to furnace about 15 feet away. What I wish to know is, if the laundry stove is not used, only the furnace, would we get hot water from the furnace tank, as both tanks will be connected to the same pipe system or all fixtures. Would be very glad to have this problem solved for me and hope to get a satisfactory answer. Both tanks will be in the basement. How can this be done?

A. J. PISCHKE.

-, Kansas, October 13, 1922.

### Two Installers Solve Chimney Problem.

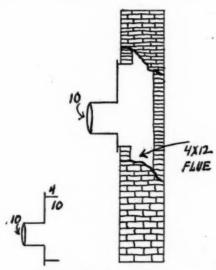
On page 21 of our October 7th issue, we published an inquiry from one of our Wisconsin subscribers in which he requested help in solving the problem of improving the draft in a chimney which was too small.

We publish herewith suggestions from two of our subscribers—one in New Jersey, another in Wisconsin—both of which will no doubt prove helpful.

C. W. Davis, who is in the warm air furnace and sheet metal contracting business in Wisconsin, writes as follows:

#### To American Artisan:

In answer to the letter from G. T. Mueller & Son, I suggest that while the flue, with only 48 square inches of space, is altogether too small he will secure fairly satisfactory draft, if he will cut his flue off about twelve inches from bottom of inlet and break the brick



Solution by C. W. Davis.

out twelve inches wide and twenty high and make a cover with a flange as in the accompanying illustration. Make this out of 20 or 22-gauge iron and dovetail a ten-inch collar into the cover.

I never connected a furnace to a four-inch flue without such a joint and I have always found it successful in twenty years' experience.

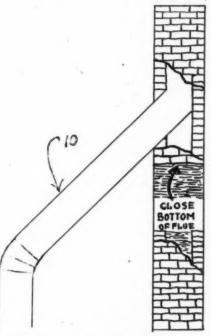
C. W. DAVIS.

Wisconsin, October 10,

The other solution comes from George R. Dupont, a successful installer and sheet metal contractor in New Jersey, whose letter follows: To American Artisan:

Replying to the request of G. T. Mueller & Son for help in solving his chimney puzzle, here is a plan which I have found successful:

Place one joint of pipe on top of opening of chimney, thereby increasing it to 12 inches diameter.



Solution by George R. Dupont.

Set cap eight inches above pipe. Make pipe from furnace to flue as shown in the illustration and see that there are no other openings into the chimney. Close the bottom of the flue as indicated.

You have been trying to crowd 78 square inches of air into 48 square inches of space.

Yours truly,
GEORGE R. DUPONT.
—, New Jersey, October 11,
1922.

### Four Real Help Books for Furnace Installers.

The International Heater Company, Utica, New York, has just issued a 44-page book containing advertisements and other selling helps for installers of warm air furnaces.

There are shown seven 3-column advertisements, each ten inches in

length, 24 two-column ads of various lengths, twelve I-column ads of various lengths, and scores of illustrations for use in making up "home made" advertisements.

A series of nineteen movie slides are also shown, together with suggestions for business cards, reproductions of metal signs and hangers, street car cards, etc.

A page is given up to samples of sales letters and other pages show reproductions of booklets, envelope enclosures and other helps for the furnace installers' salesmen.

Other publications from the International Heater Company go into detail on furnace installation. For example, one of the catalogues contains the simple method of determining the area of pipes for the various rooms as adapted from the code recently approved by the furnace and contractors' associations. It also has a table giving the sectional area of various sizes of pipes with the smallest riser allowable and the smallest floor register.

This same catalogue gives some other interesting information on such subjects as the air supply, chimneys, installing a furnace, selecting a heater, etc.

Another catalogue is devoted to the general line of International warm air heaters and contains advice on heating equipment which any furnaceman may with profit pass on to his customers. The interesting matter in this book may be judged from a few of the chapter heads as follows: "The Importance of Heat," "What Type and Size Heating Apparatus Should You Choose," "A Word About Prices," "Extravagant Claims for Fuel Saving," "About Fuels and Chimneys," "Warm Air an Ideal Heat."

A fourth booklet is devoted to furnace pipe and fittings, registers, regulators and sundry accessories. These are generously illustrated throughout the book, and as might be expected, the list price is printed in connection with the text matter.

As these books have been issued for general distribution, a copy will be sent to anyone for the asking.

### Practical Helps and Patterns for the Tinsmith.

Aids to the Improvement of Craftsmanship and Business. News from Various Branches of the Sheet Metal Trade.

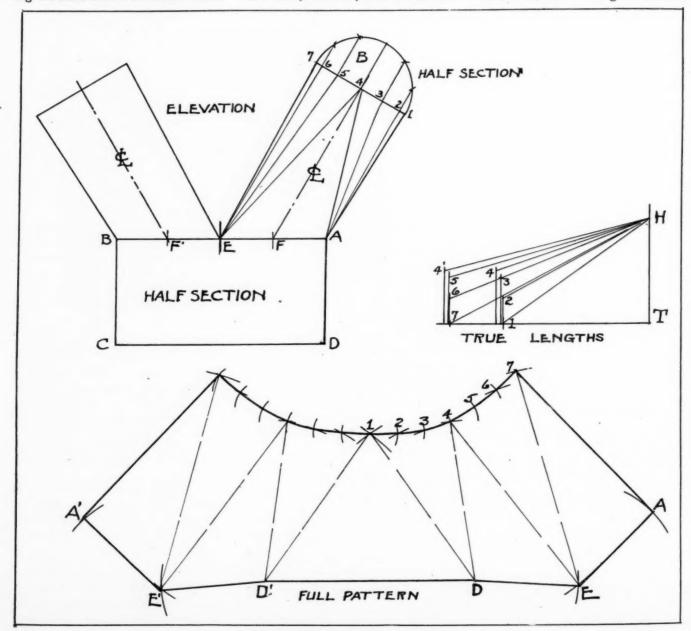
#### PATTERNS FOR TRANSITIONAL BRANCH.

By O. W. Kothe, Principal, St. Louis Technical Institute, St. Louis, Missouri. Written especially for American Artisan and Hardware Record.

Some shops have very peculiar ways of designing their work and in most instances appearance is totally neglected in order to save a few moments' time. In this drawing we have a sort of branch made

by some shops who give wonderful testimony of its practicalness. It is not a good fitting because the throat lines do not merge properly and therefore there is a retarding and friction produced that is very pronounced, especially for such a large base section to supply the branch pipes.

However, to lay out a fitting of this kind, the transitions are merely placed on an angle and built to the size of the base, joining them as at E. This, however, does not accommodate the areas, but it makes something and that is all that some shops consider. When the elevation is designed, describe the section B and divide in equal spaces, draw lines to the corner from the base 1-7 to A and E. Pick these elevation lines and set in diagram of true lengths on the base as T-1-2-3, etc. From these points erect lines equal to those half sectional lines in B. From here draw lines to H of which H is equal to A-B of half section. This gives our true



Patterns for Transitional Branch.

lengths and we can develop the pattern.

To start the pattern draw any line as D-D', equal to twice the length of A-D of the lower half section. Then pick true length H-1 and using B and D' as centers, strike and cross arcs in point I. Then strike arc 2 from center I equal to one of the spaces in half section B. Now pick true length H-2 and using D as center, cross arcs in point 2. Repeat this process until point 4 is established. Then pick the miter line A-E from ele-

vation and using D and D' as centers, strike arcs as at E and E'. Next pick true length H-4' and using point 4 in pattern, cross arcs in point E and E'. After this use these new centers for developing the points 5-6-7 as shown. After this pick half the space of A-B which would be A-E and corresponds with A-D in this case and set in pattern as E-A and E'-A'. Pick the elevation line 7-E and using point 7 in pattern as center, cross arcs in point A. This gives the pattern only edges are allowed extra.

### Mary Sold Her Dolly for a Penny and Thought She Had Made a Good Sale.

Greenberg Draws a Lesson from That Transaction on the Matter of Selling a Job at a Loss to Gain a New Customer.

Written Especially for American Artisan and Hardware Record by J. C. Greenberg, Cleveland, Ohio.

JIM CUTTER was real happy when I called on him last week. He had landed a pretty good sized job and was apparently glad to have landed it. I remarked that there should be a pretty good slice of profit in it for him and that he was really getting along fine.

"No," Jim answered. "I took this job practically at cost. You see the Colonial Realty Company are large property owners and their trade is worth quite a little bit to me. I believe that this job will perhaps stand me a little loss, but getting a good customer who has so much work to do is worth a little loss to land it. I figure that it is advertising in a sort of a way, and I will make it up later on on some of their bigger jobs."

When Jim told me the above, I nearly flew off of the handle. It really got me sore to hear it. I also did some figuring and let it shoot right from the shoulder.

"Jim," I said, "there are thousands of boobs like you are. You have an idea that selling a job at a loss is good business, and that you are a real wise business man in doing so. You have a pipe dream that because you played the fool that you will get all of the Colonial

work. Listen, Jim, no fool can get business, I don't care how much money he loses. You can not make any profits by losing money."

"Now just wait a minute," Jim said hastily, "I am really making an investment in this case. I will make this little loss up before I am three months older."

"Jim, this is impossible," I said. "Once you have had a loss, you can never make it up. This profit is gone forever. If you overcharge them on any future work you will be dishonest. Selling at a loss, and a dishonest charge are two things that the bankruptcy courts are in existence for. It thrives on just such business transactions. Do you suppose that you are different than other business men who have tried the very same thing? You can not stand it if you lose money. You say that you call this advertising. What kind of advertising do you call it? In a way, you are advertising to all of the people that you do business with, that pretty soon you will be unable to pay your bills and that they better watch you. Your idea is insane."

"I don't agree with you at all," Jim answered. "The only way to get a good customer is to give him a price that will attract him and hold him. That is just what I am doing."

"I will grant that attracting customers is a good scheme," I replied. "But what good are customers to you if you lose money on them? How do you expect to prosper. The way you figure is that the more profitless customers you have the better off you are. I figure that the more customers you have of the losing kind, the more money you lose, and the more customers you get, the rottener business will be."

"Gee whiz," Jim exclaimed.
"From the way you talk, you think that all of my business is done at a loss. This is a case that is an exception and there is excuse for it."

"Jim," I said earnestly, "all great conflagrations always started with a tiny blaze that did not mean much. Your habits as they grow on you are at first just one little act. The first little act of stealing eventually lands on in the penitentiary. You think that this loss on the job for the Colonial is nothing. To me it is an act which is complete in itself and shows a weakness in you."

"Well," Jim answered, "I think that I can stand it all right. You and I differed on a lot of things already. But just the same I am convinced that I did a clever thing, and that it will pay me in the long run."

"So you actually think it was clever of you, do you? Let me tell you, Jim, that it does not take a lot of sense to sell goods at a loss. Any baby can do it."

Jim was getting red in the face. He was sore all over, but we were good friends and had many an argument, so I did not mind him. He looked up and said, "You have a nasty manner of saying things, but I do not mind you anyway. However, if you think that any baby could sell goods you are exaggering a lot. That is all I have to say."

It seems that Mrs. Cutter was listening to our argument, so she sent in her little girl to tell us to stop that noise. The little girl had

a pretty dolly in her arms, and here I saw my opportunity. "Mary," I said, "I'll give you a penny for your dolly." And putting my hand in my pocket I brought forth the cherished penny and offered it to her. She took the penny, handed me the dolly and ran off to the candy store and soon came back with a big red sucker. I laid the dolly on the bench and turning to Jim said, "that dolly cost at least fifty cents, but little Mary sold it to me for a penny. Does that prove my argument that a baby can sell goods at a loss? Does it, Jim?"

"Doggone you anyway," was all that Jim could say. But he smiled in saying it. The point was brought home forcibly—wasn't it?

Now, friend reader, get down to earth and search your memory. See if you have ever done the same thing that Jim did. See if you have ever done work at a loss under the false notion that it was good business to lose on a job in order to get another one. You can not lose on one job and overcharge on another one to 'make it up.' There is only one way to do business, and it is that every job must bring its own profit. Once you have a loss, you can never make it up. Once you give a losing price, you must always do it if you want to hold that so-called customer. Advertising is not telling the public that you are willing to lose money. Forget it, brother, and get down to real profitable transactions. Always remember that a baby can sell goods at a loss without even getting a headache. Remember that only a fool does it. A baby grown into a fullsized man, who is still a baby, is foolish and will fail in business. The first little act is in itself only a little thing, but it leads to the biggest sorrow—FAILURE.

Make every job show a profit, and as you go along, your bank account will become bigger and you will become happier. The man who is happy in his business is the successful man. There is no other way to business success. You are either happy in your success, or sorrowful in your failure.

### Cecil R. Lambert Is Killed in Automobile Accident.

Cecil R. Lambert, president of the Cecil R. Lambert Company, agents, Detroit. manufacturers' was killed recently while riding in a taxicab to the Morrison Hotel, Chicago. The taxicab was struck by a speeding sedan which was stolen from a restaurant owner, and Mr. Lambert was crushed beneath the cab, which was turned completely over. His death was instantaneous, although the driver was only slightly cut. Mr. Lambert was 35 years old, the son of the late Charles R. Lambert, former president of the Clayton & Lambert Manufacturing Company, Detroit, who died about a year ago.

### What Size Ventilator Should Go with 24 Inch Pipe?

To American Artisan:

I have 20 globe ventilators to make, the pipe to be 24 inches. I would like to know what size to make the tops to be in proportion and to have the area.

Yours truly, CHRIST LOESSEL. -, Michigan, October 14, 1922.

### New Sheet Metal Contractor Wants Catalogues.

The Loughnane Roofing & Metal Works, 1622 Mulberry Street, Vicksburg, Mississippi, has opened for business and desire catalogues from manufacturers and supply houses.

They are planning to install warm air furnaces, do copper work, make and erect skylights, smokestacks, do radiator repairing and a general sheet metal contract business.

#### Wants Warehouse for Steel 75 Feet Wide and 600 Feet Long.

The International Steel and Wire Company, Evansville, Indiana, manufacturers of store fronts, ornamental iron work, etc., are in the market for a second hand building to be used for warehouse and fabrication purposes.

President Weber of the Company has written us the following letter:

#### To AMERICAN ARTISAN:

We wish to purchase immediately a good second hand building, 75 to 90 feet wide and 550 to 600 feet long, to be used as a structural steel warehouse and fabricating shop. We would wish to purchase in connection therewith a traveling crane of 10 to 20 ton capacity.

We are principally interested in the steel frame work, including colunms, trusses, bracing and crane girders. We are also interested in a traveling crane therefor. Moreover, the building we purchase must have sufficient height for the purpose it is to be used.

If you have anything of this nature to offer, please given us full data as to price, tonnage, dimensions, capacity of the various supporting members, etc. What would be better is a blue print giving all dimensions, details, sizes, etc.

If you have nothing to offer we shall appreciate it if you will kindly send us the names and addresses of salvage companies or anyone you may know of who might have the steel frame work for such a structure to offer for prompt delivery. We would entertain a bid f. o. b. cars and also a proposition based upon we dismantling the structure.

Awaiting your reply, we remain, Very truly yours,

P. O. Weber, President.

Evansville, Indiana, October 18, 1922.

#### H. N. Taylor Recommends High Grade Terne Plate for Roofing.

At a meeting of the salesmen of Fleck Brothers, Philadelphia, H. N. Taylor, President of N. & G. Taylor Company, the well known manufacturers of tin plate and other sheet metals, spoke on the manufacture, uses and advantages of high grade terne plate for roofing purpose, illustrating his address by lantern slides.

### Habig Brothers Boost for Sheet Metal.

In their individual advertising campaign, Habig Brothers, Cumberland, Maryland, one of the nine sheet metal contractors in that city who are conducting a co-operative advertising campaign to increase the use of sheet metal, are setting an excellent example to contractors in other cities.

On page 30 of our September ninth issue we showed one of these co-operative advertisements. Read this advertisement again, also the four shown on page 44 of our September second issue, published by the sheet metal contractors in Reading, Pennyslvania, and then read the following letter sent out by Habig Brothers.

You will agree that they have something to say in that letter—and that they said it well. Here is the letter:

"Do you fully realize the advantages and possibilities of Sheet Metal Products?

"Do you know it is always fireretarding and generally fire-proof?

"Sheet metal, compared to wood, plaster, cement, terra cotta and various compositions, in lighter in weight, requires less and lighter frame work, is adaptable to any size, shape or design, and compares favorably in cost.

"On account of these advantages, we especially recommend good sheet metal for cornices, skylight frames, ceilings, side walls, partitions, frames for electric signs, fire wall covering, guards for exposed machinery, vent ducts, chutes, roofing, spouts, and innumerable other purposes.

"Good sheet metal, combined with good workmanship, will give absolutely satisfactory service.

"We have a well equipped shop to take care of the usual sheet metal work, as well as the unusual kind.

"We will be glad to talk over your problems. Come in to see us at any time, or just call 1521.

Let us do your next sheet metal job."

Why don't you get on the job and follow the example set by really progressive sheet metal contractors?

#### What Will Brighten Old Lightning Rod Tube?

To AMERICAN ARTISAN:

Do you know of any solution that we can prepare to brighten up old lightning rod tube that has been exposed to the weather for years and has become corroded and black, to again give it a new and finished color?

#### Notes and Queries

"Little Draft Man" Regulator.

From C. B. Rose, 322 South Carolina Street, Louisiana, Missouri.

Will you kindly let me know who makes the "Little Draft Man" Furnace Regulator.

Ans. — Sahlin Manufacturing Company, 35 Ottawa Avenue, Grand Rapids, Michigan.

Ball Bearing Fittings for Revolving Ventilators.

From Harry T. Klugel, North Emporia, Virginia.

Please advise me where I can purchase ball bearing fittings complete for use on revolving ventilators.

Ans.—Chicago Pulley and Shafting Company, 40 South Clinton Street, and Standard Steel and Bearing Company, 1806 South Michigan Avenue; both of Chicago, Illinois.

Address of Great Western Stove

From Stove Dealers' Supply Company, 310 Chestnut Street, Milwaukee, Wisconsin.

Will you kindly furnish us with the address of the Great Western Stove Company.

Ans.—Leavenworth, Kansas.

Slate Roofing.

From Sterling Sheet Metal and Roofing Company, 202 South Front Street, Sterling, Colorado.

I would like to know where to buy slate roofing.

Ans.—Auld and Conger Company, 942 Prospect Avenue, Cleveland, Ohio; Beckman-Dawson Roofing Company, 19 South La Salle

Street, Chicago, Illinois; Farwell Cornice Company, 3935 Southport Avenue, Chicago, Illinois; Kasch Roofing Company, Akron, Ohio, and Valley Cornice and Slate Company, Limited, Saginaw, Michigan. Repairs for "Skokie" Lawn Mower. From F. M. Spencer, Green Lake,

Wisconsin.
Please advise me where I can get repairs for a lawn mower marked "Skokie—Chicago."

Ans.—R. Herschel Manufacturing Company, Peoria, Illinois.

Iron Guards for Windows...

From Chappell Plumbing and Heating Company, Chappell, Nebraska.

Kindly inform me who manufactures iron guards for windows, such as are used to protect rear store windows.

Ans.—The Fred J. Meyers Manufacturing Company, Hamilton, Ohio; F. P. Smith Wire and Iron Works, Clybourn and Fullerton Avenues, Chicago, Illinois; and Western Wire and Iron Works, 18th Place and Sangamon Street, Chicago, Illinois.

Small Triangular Steel Wire. From C. DeWitt Wagner, Cedar Rapids, Iowa.

Please let me know where I can buy some small triangular steel wire, either tinned or galvanized.

Ans.—J. A. Roebling's Sons, 165 West Lake Street, Chicago, Illinois.

Oil Burning Equipment.

From George A. Allen and Company,
7 and 9 Dorchester Street, South
Boston, Massachusetts.

We should like to know who manufactures an oil burning equipment suitable to install in a steam boiler, fire pot 24 by 30 inches.

Ans.—Standard Foundry and Manufacturing Company, 204 Scarritt Building, Kansas City, Missouri; McEwen Furnace Company, Department 103, 15th and Brooklyn, Kansas City, Missouri; Breeding Heat and Power Corporation, 311 Vine Street, Cincinnati, Ohio.

Repairs for "Atlas Windsor" Furnace. From Mr. Bauschen, care Crane Company, 836 South Michigan Ave., Chicago, Illinois.

Please let me know where I can buy repairs for the "Atlas Windsor" furnace.

Ans.—Northwestern Stove Repair Company, 654 West 12th Street, Chicago, Illinois.

### Review of Conditions in the Metal Markets.

### General Situation in the Steel Industry. Report of Prices and Tendencies in Sheet Metals, Pig Iron, etc.

Non-Ferrous Market Firm, Excepting Copper.

Traffic difficulties continue to harass the non-ferrous metal market, particularly in the zinc trade, where the freight embargoes and car shortage interfere with shipment of ore to smelters, shipment of slab zinc to consumers and the movement of galvanized sheets from mills. Recovery of zinc from the sharp reaction it encountered last week was the outstanding feature of the week. Excepting copper, metal prices generally have shown a strong tendency in comparatively quiet markets. Tin at 34.75 cents went to the highest of the year.

#### Copper.

While recent importations of copper have been large, rarely paralleled in history, the domestic production has been restricted by labor supplies, and shipments still are exceeding total supplies by a margin of 20,000,000 to 30,000,000 pounds.

Foreign buying has been only moderate, but has shown signs of improvement. Casting copper held firm at 13.87 cents to 14 cents, refinery.

The copper market has been the victim of shading, first on sales of small lots at five to ten points below the 14 cents delivered basis, which has prevailed since June, and then by producers. For a time the latter held firmly, and bids of less than that price on tonnages were rejected.

Electrolytic is being sold by producers at 13.87 to 14 cents delivered for shipment over the next three or four months. Prime Lake, prompt and October delivery, was quoted at 14.12½ to 14.25 cents.

#### Zinc.

The zinc market, after reacting to 6.60 cents East St. Louis, recovered rapidly to 6.80 cents, at which figure it clung firmly. This

is close to the high peak of the previous rise and has been attained with comparatively little consuming inquiry. High grade zinc has held at 7.75 cents, delivered, with good business. Continuing its trend of recovery the East St. Louis market, for spot and nearby delivery, moved as high as 6.95 cents. The base price of sheet zinc remains at 8.50 cents, f.o.b. mill.

#### Lead.

The sellers of prompt lead are limiting their offerings at each price level, but the demand is not insistent enough to carry the price along very fast at present, so that while the tendency, if anything, is still upward, there is little material change to report. East St. Louis was quoted at 6.50 to 6.75 cents, spot delivery. The contract price of the principal interest remained at 6.50 cents, New York, but the outside market was reported considerably higher, spot stocks being small and producers being generally behind in their deliveries.

#### Tin.

With the entrance of American consumers in the tin market, the new high price level was not only maintained, but fractionally bettered at 34.75 cents. Previously, for nearly a month, bull operators in London had been gradually forcing the market up little by little, being aided finally by the settlement of the Turkish crisis. Straits tin advanced 1/2 cent during the week. At this figure the price is above the 30 year average of 34.40 cents. Although the world's visible supply of tin has been increasing lately, it is thought the invisible supply is on the decrease. The quantity of pig tin imported in the fiscal year ending August 31, 1922, was one hundred million pounds as against eighty million pounds the previous year. But the larger production

yielded only \$25,000,000 as against \$42,000,000 for the smaller.

#### Solder.

Solder prices, as quoted in the Chicago market were: Warranted, 50-50, per 100 pounds, \$23.25; Commercial, 45-55, per 100 pounds, \$21.75, and Plumbers', per 100 pounds, \$20.50.

#### Bolts and Nuts.

Producers of bolts and nuts find the situation for the remainder of the year satisfactory, with excellent bookings of contracts for fourth quarter delivery and comfortable sales of open business by consumers who do not contract. Prices are steady and there appears to be no tendency to shade prices.

Inquiries in the Cleveland district continue fairly numerous but are not quite as large as they have been in the past. However, the volume of business is sufficient to keep the mills near capacity output. Steel again is plentiful.

Jobbers of bolts, nuts and rivets at Pittsburgh are not ordering as heavily as they have for some time past, although users continue to furnish specifications on orders as needed. Usually a mixed carload up to 200 tons at a time is involved although occasionally an order is placed for a larger amount. Two different prices are current in connection with some grades of nuts, and some rivet manufacturers continue to quote 3.00 cents and 3.10 cents, Pittsburgh base, on structural and boiler rivets, respectively, while others quote \$3 in advance of those figures.

#### Nails and Wire.

Attributable to fuel and car shortage and resultant hampered production, inquiry for nails continues heavy, while inquiry for practically all forms of wire products is much heavier than normally at this eason. Producers are being forced to refuse much of the business offered, because they are unable to meet delivery requirements. The price situation is steady with wire at 2.45 cents, Pittsburgh, and nails at 2.70 cents, Pittsburgh.

#### Tin Plate.

At \$4.75 the tin plate market is buoyed up by the purchases from time to time of container manufacturers, augmenting tonnages already received on contracts. Further attempts have been made to place orders for early shipments, but such buyers have had to content themselves with deliveries in December in the Pittsburgh territory, although some have been able to close for earlier deliveries in the Wheeling, West Virginia, district. All things considered, the buying rate at this time of the year is considered good. Occasionally an export tonnage is noted and slightly higher prices now are reported obtainable since various users abroad are willing to pay slight premiums for the American-made product. At times stock tin plate is offered at a lower figure than \$4.75, but just now stock lists, are low, having been cleaned up in the past several weeks by the various buyers who have had to have material promptly. Chicago warehouses advanced prices as follows: Pig tin, 38 cents; bar tin, 401/2 cents. Sheets.

Shortage of steel, transportation tieups, continue to make execution of sheet orders difficult. Mills report slightly better car placements but state it is difficult to get the railroads to move the cars. Numerous efforts to place orders for various kinds and grades of sheets are being made. Pressure is particularly strong from the automobile interests, indicating a continuing demand for full-finished automobile sheets at 4.70 to 5.00 cents, Pittsburgh base. In the New York sheet market, rumors of occasional price cutting have been heard. As far as known, they are unfounded and the minimum figures on black and galvanized sheets, respectively. appear to be 3.50 cents and 4.50 cents, Pittsburgh base. The customary price on blue annealed sheets is 2.75 cents, Pittsburgh, although it is understood that occasional business goes at 2.60 cents.

#### Old Metals.

Wholesale quotations in the Chicago district which should be considered as nominal are as follows: Old steel axles, \$19.00 to \$19.50; old iron axles, \$25.00 to \$26.00;

steel springs, \$21.00 to \$21.50; No. I wrought iron, \$19.00 to \$19.50; No. I cast, \$19.00 to \$19.50, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 9 cents; light brass, 5 cents; lead 4½ cents; zinc, 2¾ cents; and cast aluminum, 14 cents. The demand for nearly all lines is heavy.

#### Iron and Steel Market Approaches Stabilized Position Despite Car Shortage.

Chicago Prices Down \$1 As Valley Basic Sells Under \$30

FURTHER progress is being made by the iron and steel market toward a better stabilized position as coal and coke conditions continue improvement, but insufficiency of transportation is a retarding factor. Raw material prices, notably coke and pig iron, are working lower. Finished steel is responding slightly while there is evidence that buyers are holding back waiting for the process to complete itself.

Accumulations of rolled products at Pittsburgh and Youngstown mills are still large, probably upward of 300,000 tons, but the accumulations are not increasing, and the week has brought eight more blast furnaces into action. The fuel situation is steadily more favorable to buyers.

With traffic conditions reaching the proportions of the outlaw railroad strike of 1920, motor trucks are being again brought into use, the service adding \$3.50 to \$20 a ton to the consumer.

Weakness is evidenced in the northern pig iron market and the price is off \$1. Number 2 foundry iron was quoted at \$31, and inquiry and buying was effectually halted. Of the twelve possible producing stacks in the Chicago district seven are now active, the third Iroquois stack having been blown in.

Some inquiry is out for the first quarter. The market seems generally on the basis of \$31 for last quarter and \$32 for first quarter. Southern iron is softer and is offered at \$27, Birmingham base, although shipments are difficult. Special irons are in small demand. Silveries, low phosphorus and charcoal grades are unchanged. The market for ferroalloys is quiet.

Valley basic has been sold below \$30 furnace and a scrap interest is offering at \$29.50 a tonnage obtained on a recent exchange deal.

St. Louis reports that business of stove and job foundries is showing marked improvement. Several of the stove manufacturers are operating at full capacity, with a demand for miscellaneous castings the most active of the year. Prices hold steady, \$28 to \$30 being quoted for No. 2 southern (1.75 to 2.75 silicon) and \$32 for northern iron of the same grade.

The demand for pig iron for fourth quarter delivery is less active in the Birmingham district, but quotations show no signs of weakening. The little selling being done is at prices ranging up to \$30 for No. 2 foundry. Little of this year's remaining output is unsold. The minimum price of recent sales was \$28.50.

Sales at Buffalo were light. One furnace reported an aggregate demand for 9,000 tons of malleable and foundry iron, one inquiry alone being for 5,000 tons. The price of Number 2 plain was \$31.

### Current Hardware and Metal Prices.

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

	METALS	HARDWARE, SHEET METAL SUPPLIES,	Countersink, American Snailhead 1 75	CARRIERS.  Hay.  Diamond, Regulareach, net Diamond, Sling
	PIG IRON.	WARM AIR HEATER	" Rose 2 00 " Flat 1 40 Dowel.	CASTERS.
Gouthann	PA: No	FITTINGS AND AC-	Russel Jenningsplus 20% Gimlet.	Standard—Ball Bearing. 50 & 189
Southern Fdy No. 2		CESSORIES.	Standard Double Cut Gross \$8 40 Nail Metal Single	Common Plate. Brass Wheel159
coal .	36.15		CutGross \$4 00—\$5 00 Reamer.	Iron and porcelain wheels,
Malleable 31 00 to 32 00		ADZES,	Standard SquareDoz. \$2 50 American Octagon " 3 50	Philadelphia Plate, new list
FIRST QUALITY BRIGHT		Barton's	No. 1 ComomnEach 18c No. 26 StanleyEach 76c	CATCHERS, GRASS,
	TIN PLATES. Per Box	AMMUNITION.	BLADES, SAW.	No. 160Sper doz. \$13 2 No. 165S 14
C	14x20 112 sheets \$10 00	Shells, Loaded, Peters. Loaded with Black Powder 18% Loaded with Smokeless	Wood. Atkins 30-in.	No. 1808
X XX	14x20 11 26 14x20 12 60	Powder18%	Wood. Atkins 30-in. Nos 6 40 26 Diston 30-in. Nos. 6 66 26	" 25 lb. cans, " 1
XXX	14x20 12 90	Winchester. Smokeleds Repeater	Diston 30-in. Nos 6 66 26 \$9 45 \$10 05 \$9 45	Pecora, 5 lb. cans
C XXXX	14x20 15 25 30x28 20 00	Grade	\$9 45 \$10 05 \$9 45 BLOCKS.	" 25 lb. cans " 1
X	20x28 32 50	Grade	Wooden	Breast Chains.
XX XXX	20x28 25 20 20x28 27 80	U. M. C. Nitro Club20 & 4%	BLOW TORCHES (See Firepots).	With Slide doz. pairs, \$5
XXXX	20x28 30 50	Nitro Club 20 & 4% Arrow 20 & 4% New Club 20 & 4%	Stove. BOARDS. Per. Dog.	Doublestack " 9 1
	COKE PLATES.	Gun Wads-per 1000.	26x26, wood lined\$14 45 28x28, " " 16 95 30x20, " " 19 00	Picture Chains. Light brass, 3 ft., per doz. 1 1
	0 lbs 20x28 \$11 80	Winchester 7- 8 gauge 10&7 1/4 % 9-10 gauge 10&7 1/4 % " 11-28 gauge 10&7 1/4 %	30x30, " " 19 00 26x26, paper lined 8 15	Doublestack 9 1 With Covert Snaps " 6 1 Picture Chains. Light brass, 3 ft., per doz. 1 1 Heavy brass, 3 ft. " 1 Sash Chain. Steel, per 100 ft.
okes, 20	0 lbs 20x28 12 00		26x26, paper lined 8 15 28x28, 9 10 30x30, 10 86	Steel, per 100 ft.
	4 lbsIC 20x28 12 35 0 lbsIX 20x28 14 10	ASBESTOS.	Wash.	0
		Paper up to 1/16	No. 760, Banner Globe (single) per dos. \$5 25	OR
BLUE ANNEALED SHEETS.		Corrugated Paper (250 sq. ft. to roll)\$6.00 per roll	No. 652, Banner Globe (single)per dos. 675	IR
Baseper 100 lbs. \$4 00		AUGERS	No. 801, Brass King, per doz. 8 25 No. 860, Single—Plain	Champion Metal.—Extra Heavy.  1H Cable Bash Chains.
	ALOS COLO DOLLED	Boring Machine40&10%	Pump 6 25 BOLTS.	SteelList Net Plus 15
ONE	PASS COLD ROLLED BLACK.	Carpenter's Nut50% Hollow.	Carriage, Machine, etc. Carriage, cut thread, %x6 and sizes smaller and	CHALK, CARPENTERS'.
	per 100 lbs. \$4.65	Bonney'sper doz. \$30 00 Post Hole,	and sizes smaller and	Red 2 White 1
	per 100 lbs. 4.70	Iwan's Post Hole and Well	shorter	Common White School
	per 100 lbs. 4.80	Vaughan's, 4 to 9 in., with- out handles per doz. \$14 00	er and shorter	CHIMNEY TOPS.
	per 100 lbs. 4.85	AWLS.	Machine, sizes larger and longer than %x450-5%	CHECK, DOOR.
		No. 3 Handled per dos. \$0 65	Stove	RusswinNet III
	GALVANIZED.	No. 1050 Handled " 1 40 Patent asst'd, 1 to 4 " 35	Gem, iron	Cold. CHISELS.
	per 100 lbs. \$5.10 per 100 lbs. 5.25	Commonper doz. \$1 05	Barrel.	V. & B. No. 25, % in., each \$0 1 V. & B. No. 25, % in., each
To. 22-24	per 100 lbs. 5.40	Per.	Cast	V. & B. No. 15, 14 in 0
	per 100 lbs. 5.55	Shouldered " 1 60 Patented " 75	Flush.	Diamond Point.  V. & B. No. 15, ¼ in 0 if V. & B. No. 15, ¼ in 0 if Firmer Bevelled.  Round Nose.
io. 28	per 100 lbs. 5.35	Scratch. No 18, Socket	WroughtNet	V. & B. No. 65, 14 in 0 1 V. & B. No. 65, 14 in 0 1 Socket Firmer.
To. 30	per 100 lbs. 6.35	Handledper dox. \$2 50 No. 344 Goodell-	Wrought	Socket Firmer.
	BAR SOLDER.	Pratt, list less\$5-40% No. 7 Stanleyper dos. \$2 25	Square. Wrought	V. & B. No. 50, % in 0 1 V. & B. No. 50, % in 0 1
Varrante	_	AXES,	BOXES.	CHUCKS, DRILL.
	per 100 lbs. \$23 25	First Quality, Single	Mail. No 2 4 10 Per dox. \$18 00 \$23 00 \$29 00	DriversList less 35-40
ommerci		4 lb., per doz\$13 50	Cast Iron. Per doz\$9 50	Yankee, for Yankee Screw Drivers
	per 100 lbs. 21 75	Good Quality, Single Bitted, same weight, per	Mitre.	Anti-Bent Wood,
		BALANCES, SPRING.	Stanley's Net Prices Stearns, No. 2. per doz. \$48 00	Gal
- Claba	ZINC.	Universal.	BRACES, RATCHET.  Goodell-Pratt No. 408	Common Dash.
Slabs	7 85	Sight SpringList less 25% StraightList less 25%	No. 412 5 00	Gal
	SHEET ZINC.	BARS, WRECKING. V. & B. No. 12\$0 24	V. & B. No. 333 8 in 4 80	Adjustable. CLAMPS.
ask lots	stock10 1/4 c	V. & B. No. 24 0 48 V. & B. No. 324 0 57	V. & B. No. 111 8 in	Martin's
ess than	cask lots10%c	V. & B. No. 30 0 48 V. & B. No. 830 0 63	BURRS, RIVETING.	Screw
	COPPER.	BEVEL, TEE.	Copper Burrs only40-5% Tinners' Iron Burrs onlyNet	Steel Bar. List price plus 209
opper S	heets, base21 1/4 c	Stanley's Rosewood handle, new list	Steel, antique copper or dull	Carriage Makers'.
		Stanley iron handleNets	brass finish—case lots— 3 ½ x 3 ½ per dozen pairs \$2 75	8 . " " 28 (
	LEAD.	BINDING CLOTH.	Heavy Bevel steel inside	nose.
merican	Pig 7 50	Brass	sets, case lots—per dozen sets 7 50	Sherman's brass, %-inch per doz
	0 40	Brass, plated60%	Steel bit keyed front door	Double, brass, %-inch, per dos. 1
ar			wrought brass bit keyed	Saw Filers.
heet. Full co	otlsper 100 lbs. 9 80	Jennings PatternNet	front door sets, each 3 Is	Wentworth's, No. 1, \$12.50; N
heet. Full co	ollsper 100 lbs. 9 80 llsper 100 lbs. 10 06	Jennings PatternNet Ford Car25% off Ford's Ship25% off	front door sets, each 3 25 Cylinder front door sets, each 7 00	Wentworth's, No. 1, \$13.50; No. 2, \$18.25; No. 3, \$16.25.
heet. Full co		Auger. Jennings Pattern. Net Ford Car	Cylinder front door sets,	Wentworth's, No. 1, \$13.50; No. 2, \$18.25; No. 3, \$16.25.  CLAWB, TACK.  Wood hdl. No. 10per dos. \$1 1  Forged steel, wood hdl. " 2 1  Solid steel " 2 1